

**Technical and Administration User
Guide for the ED School Climate
Surveys (EDSCLS)**

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1. Introduction

Welcome to the ED School Climate Surveys (EDSCLS)!

The EDSCLS offers a platform that includes a suite of survey instruments developed for schools, districts, and states by the U.S. Department of Education. Through the EDSCLS, schools nationwide will have access to survey instruments and a survey platform that enable the collection and reporting of school climate data across stakeholders at the state or local level. The surveys can be used to produce school-, district-, and state-level scores on various indicators of school climate from the perspectives of students, instructional staff, noninstructional staff and principals, and parents and guardians. The U.S. Department of Education will also provide benchmark data in fall 2017 to help users interpret the meaning of their data.

The EDSCLS platform provides education agencies with the ability to survey students, their parents, instructional staff, and noninstructional staff, including principals, to provide a comprehensive picture of a school's climate.

The EDSCLS platform allows education leaders to seek the viewpoints of multiple respondent groups. A multi-perspective approach is important because each of the stakeholders experience school climate differently. The EDSCLS includes four surveys. The “student survey” is intended for students in grades 5–12. The “instructional staff survey” seeks input from teachers and other staff who provide instruction to students in schools having grades 5–12. The “noninstructional staff survey” was developed for noninstructional staff (e.g., administrators, counselors, coaches, and librarians) who provide services to students in schools having grades 5–12. The final instrument, the “parent survey,” is for parents and guardians of students in grades 5–12. For more information on the background and purpose of the EDSCLS, see [Appendix A](#).

Features of the EDSCLS Platform

The U.S. Department of Education’s primary goal in the development of the EDSCLS platform is to provide a no-cost, user-friendly, high-functioning platform that schools, school districts, and states throughout the United States can use to administer the suite of school climate surveys. To achieve these goals, the EDSCLS platform

- does not require education agencies to incur licensing fees or other costs;
- can be installed and administered using a “basic”¹ network infrastructure;
- minimizes risks to data confidentiality; and
- allows for the decentralized storage of data, accessible only to authorized users within the education agency that is administering the data collection.

The EDSCLS is also designed to minimize the effort required to conduct the survey, compile and analyze the data, and produce reports on the results. The EDSCLS platform allows administrators to create linkages to external data sources for the student survey and add more questions to each of the four surveys.

2. Technical Guide

This section provides information about how to use the EDSCLS web-based platform, from installation and configuration through starting data collections and producing reports. The section includes two parts:

¹ Please see the minimum requirements in [2.1 System Setup in Virtual Environment \(for IT Staff\)](#).

- **Section 2.1 System Setup in Virtual Environment (for IT Staff)** is intended for the education agency's IT staff who will be in charge of downloading, installing, and configuring the EDSCLS web-based platform. Step-by-step instructions for IT staff are included in [2.1.1 Installation and Configuration](#). IT staff must install and configure the EDSCLS platform before the Survey Administrator can access it. In addition, the EDSCLS platform is open-source; therefore, [2.1.3 Source Code and Database Access](#) provides the option to allow web developers and database administrators to view and make any changes to the existing PHP source code and MySQL database.
- **Section 2.2 EDSCLS Administration** is intended for Survey Administrators, who oversee the survey data collection through the EDSCLS dashboard. The dashboard contains all the tools necessary to manage EDSCLS data collections, including initiating and monitoring data collections and producing reports. It is strongly recommended that Survey Administrators become familiar with the dashboard (along with this guide) in order to address any issues that may arise during live data collections.

2.1 System Setup in Virtual Environment (for IT Staff)

This section provides instructions to IT staff on how to download and configure the EDSCLS platform package; set up the URL and e-mail; update your server with the latest version of the source code; and access the PHP code and MySQL database. The instructions in this section should be performed by IT staff with administrative permissions to a web server.

The EDSCLS package is a virtual disk to be used to create a virtual machine.² VirtualBox is the recommended virtualization application for creating and hosting virtual machines using this virtual disk. This guide will provide instructions using VirtualBox, which is free software.

Note: VirtualBox must be installed on a physical server, not another virtual machine. Running a virtual machine within another virtual machine, or nested virtualization, is neither supported and nor recommended. If VMWare is used, then VirtualBox cannot be used, and that installation is outside the scope of this guide.

The image of the EDSCLS platform consists of a Linux operating system, Apache web server, MySQL Relational Database Management System, PHP server-side scripting language,³ and the EDSCLS application. The following are the key technical requirements, followed by more specific instructions, for the platform's installation:

- Windows (Server 2008 or later, Windows 7 or later), Linux (kernel 2.6 or later), or Mac OS X (10.9 or later);
- at least 3-4 GB of RAM;
- at least 20 GB of free hard disk space, plus additional space depending upon the number of total respondents (about 1 MB per 100 respondents);
- a high-speed internet connection with at least 2 Mbps upload and download speeds; and
- a static IP and URL to which to bind the website

² A virtual machine is a software implementation of a computing environment in which an operating system or program can be installed and run.

³ Linux, Apache, MySQL, and PHP (or LAMP) are freely available and distributed under open-source licenses.

- a Secure Sockets Layer (SSL) certificate⁴

Note that these are the basic requirements for hosting the EDSCLS. Servers that meet these requirements are capable of using the EDSCLS platform for data collection and reporting; however, some additional configurations or permissions are required in order to use the platform's e-mail function for dissemination of usernames (see

⁴ A SSL certificate establishes a secure connection between the web server and the browser.

[2.2.8 Respondent Usernames Dissemination](#)) or to access the surveys from devices outside of your network. The following decision trees may help you decide how the EDSCLS platform can be installed and configured at your education agency.

The EDSCLS works best for 150 or fewer concurrent⁵ respondents using the minimum requirements as detailed above. Up to 500 concurrent respondents can be supported if dual servers are used with the following server settings: 8 vCPU, 8G Memory, 32G disk.

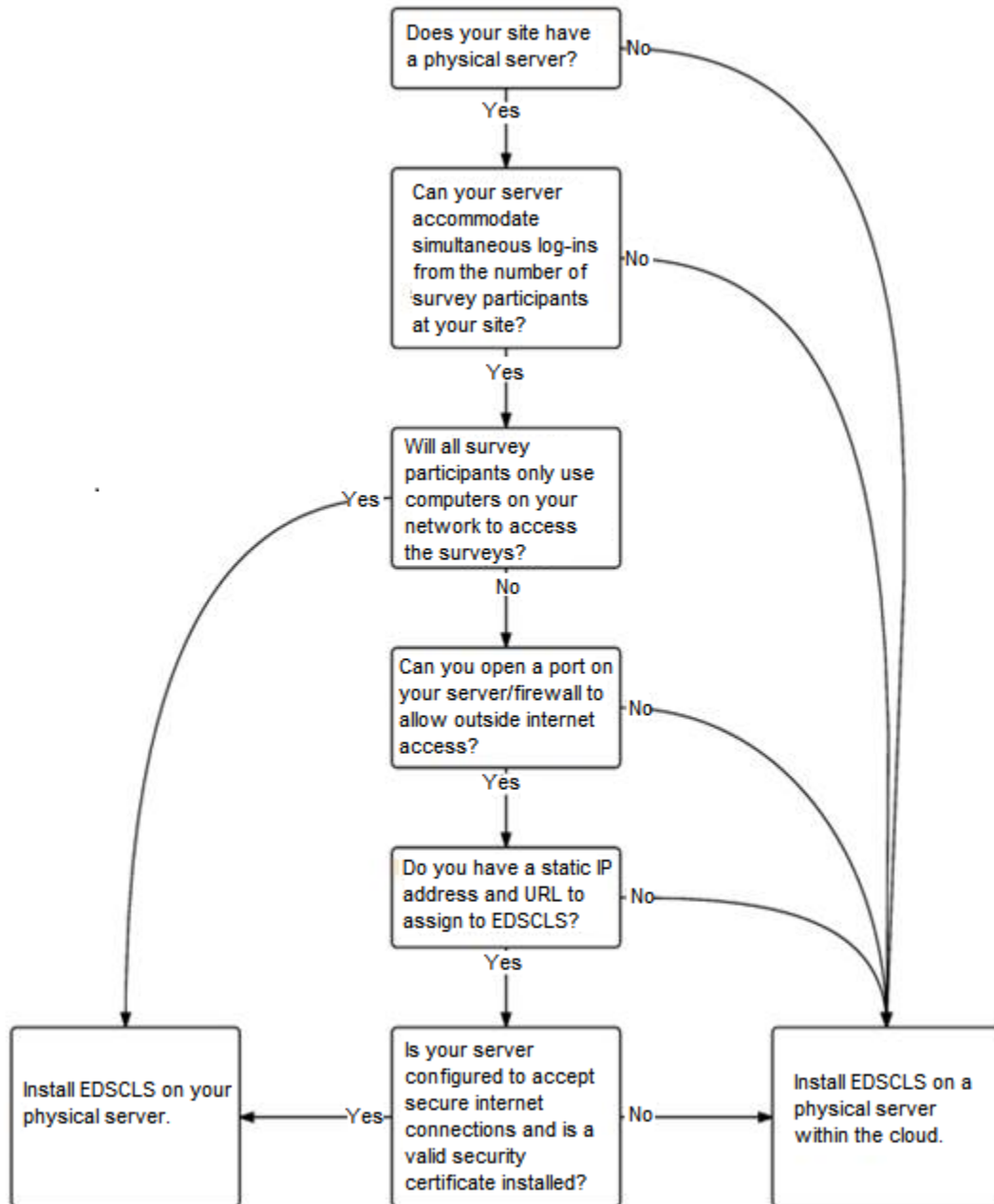
If a user wishes to support more than 500 concurrent respondents, multiple copies of the EDSCLS platform can be installed and results from the multiple copies can be combined (see [2.2.10 Respondent-Level Survey Results](#)). Due to these load limitations it is recommended that large education agencies (for example, State Education Agencies) install multiple copies of the platform. Large education agencies may also wish to reduce the load on the EDSCLS platform by staggering their survey administration such that a limited number of students attempt to access the platform at once.

NOTE

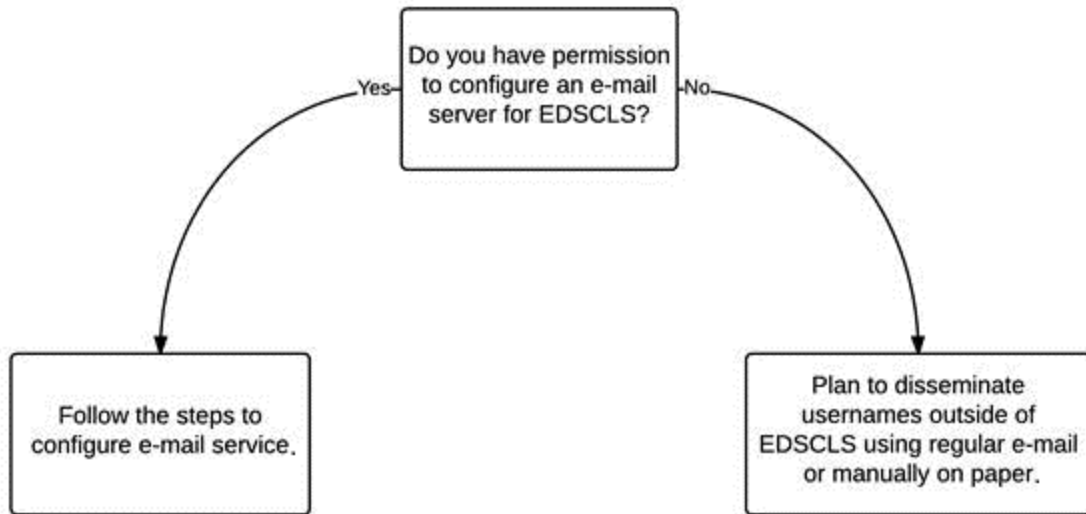
If you are a large agency and plan to install multiple copies of the platform, it is useful to think strategically about how participants will be divided between the multiple copies. For instance, if you are a State Education Agency, perhaps you assign specific districts to a platform based on their size. Or, if you are a large school district, perhaps you assign your middle schools to one platform and your high schools to another, so that you don't exceed the 500 participant limit.

⁵ Concurrent respondents are defined as all respondents answering all items in the EDSCLS survey within a 30 minute period of time. Load testing assumes that all respondents log in within the first 8 minutes, with 5 respondents logging in every 5 seconds, and each respondent spending 4-24 seconds to answer an item.

Installation



Username Dissemination



Before beginning the download and installation steps, you should first save your current work and exit from all other programs that might be running.

The estimated time for each step is listed below:

- Download the 6 GB Virtual Machine Disk (VMDK) of the EDSCLS platform from the NCSSLE website (10 minutes).
- Download and install Oracle VM VirtualBox (5 minutes).
- Configure the EDSCLS virtual machine (15 minutes).
- Create the URL and make it accessible via the web (5 minutes) and configure the virtual machine to send e-mail (5 minutes).
- Access the PHP source code (optional). This step is needed only when you want to view or modify the EDSCLS source code.
- Access the MySQL database (optional). This step is needed only when you want to view or modify the EDSCLS database.

The following section provides step-by-step instructions for installing and configuring the EDSCLS on a physical machine.

2.1.1 Installation and Configuration

Updates to the EDSCLS virtual machine, including source code changes and security patches, will be released periodically and posted on the NCSSLE website at <https://safesupportivelearning.ed.gov/edscls>. Known platform users will be notified by e-mail. If you choose to update the version of your survey platform, you have two options:

1. Replace your virtual machine with the newer version.

NOTE

Before replacing the virtual machine with a newer version, you should export the data that have been collected. **If you do not export the data before deleting the older version of the virtual machine, you will lose the data that the previous version contains.** For instructions on exporting survey data, please see [2.2.10 Respondent-Level Survey Results](#).

2. Download the new EDSCLS virtual machine and house both the new version and the previous version on your server.

NOTE

If you are housing more than one virtual machine on your server, the requirements for memory and disk space should be multiplied by the number of virtual machines you are actively storing.

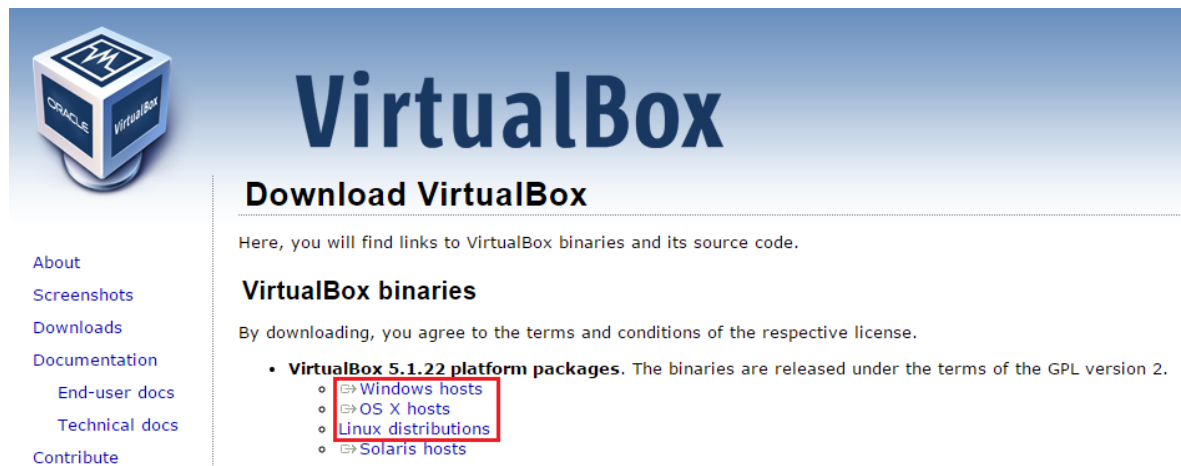
If you are currently collecting data, we recommend you NOT transition to the new EDSCLS VM until your data collection is complete.

A. To download the EDSCLS package:

1. Download the VirtualBox image of the EDSCLS platform from <https://safesupportivelearning.ed.gov/edscls>.

B. To download and install Oracle VM VirtualBox:

1. Download the latest version of VirtualBox for your server's operating system (either Windows, Linux, or Mac OS X) from <https://www.virtualbox.org/wiki/Downloads>.



2. Install VirtualBox.

NOTE

For step-by-step installation instructions, refer to <https://www.virtualbox.org/manual/ch02.html>.

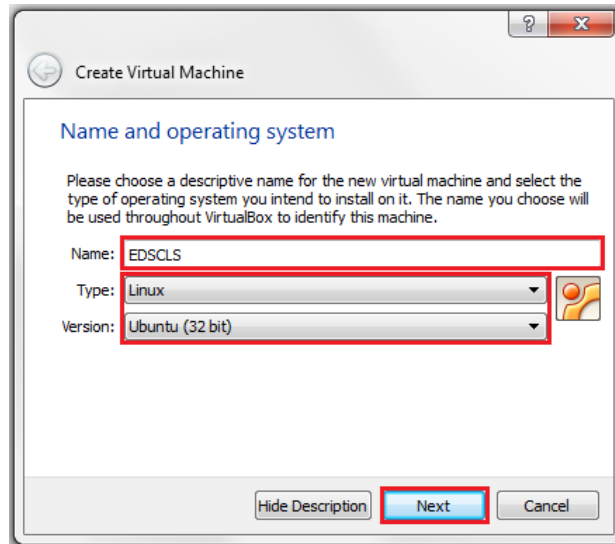
The EDSCLS virtual machine is scanned and updated periodically. It is recommended that users check the [NCSSLE webpage](#) at least once a month for updates.

C. To configure the virtual machine:

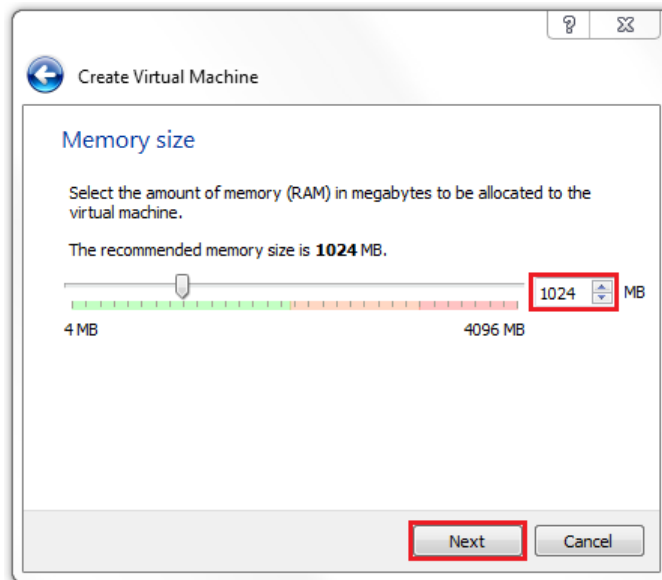
1. Open Oracle VM VirtualBox and click on the “New” button on the main tool bar.



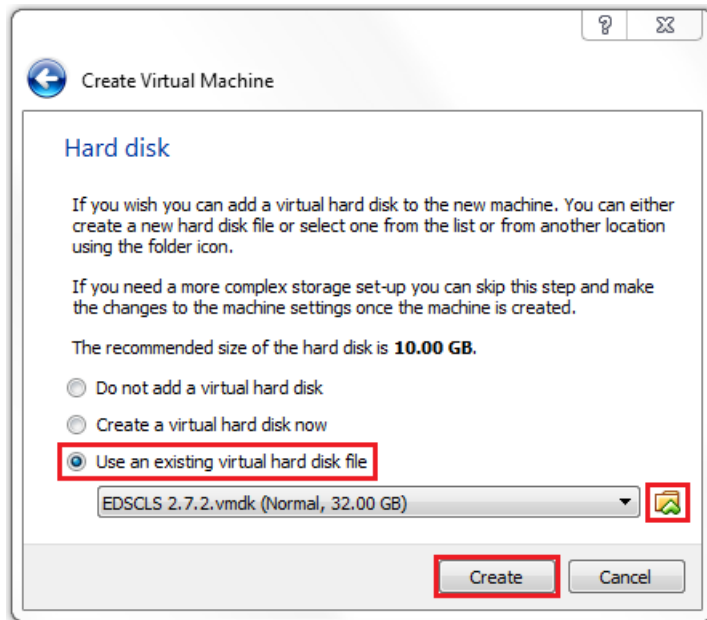
2. Enter a descriptive name for the new virtual machine in the “Name” text box (e.g., “EDSCLS”). Regardless of your own server’s operating system, select “Linux” from the “Type” drop-down box. Select “Ubuntu (32 bit)” from the “Version” drop-down box. Then click on the “Next” button.



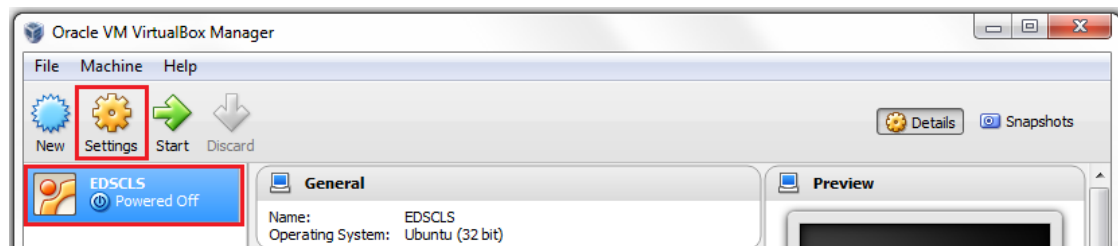
3. For the memory size, specify at least 1,024 MB, and preferably 2,000 MB, depending on your server’s specifications. Then click on the “Next” button.



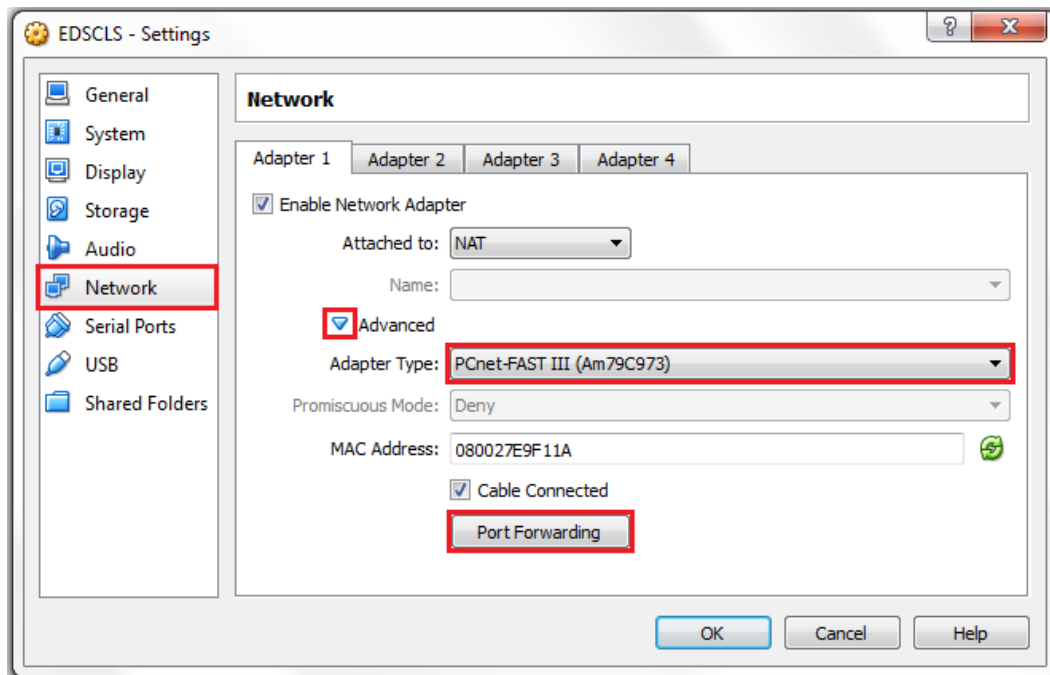
4. Select the “Use an existing virtual hard drive file” option button. Click on the *Folder* icon button, and open the downloaded EDSCLS VirtualBox image. Then click on the “Create” button. The new virtual machine should now appear on the left side of the window.



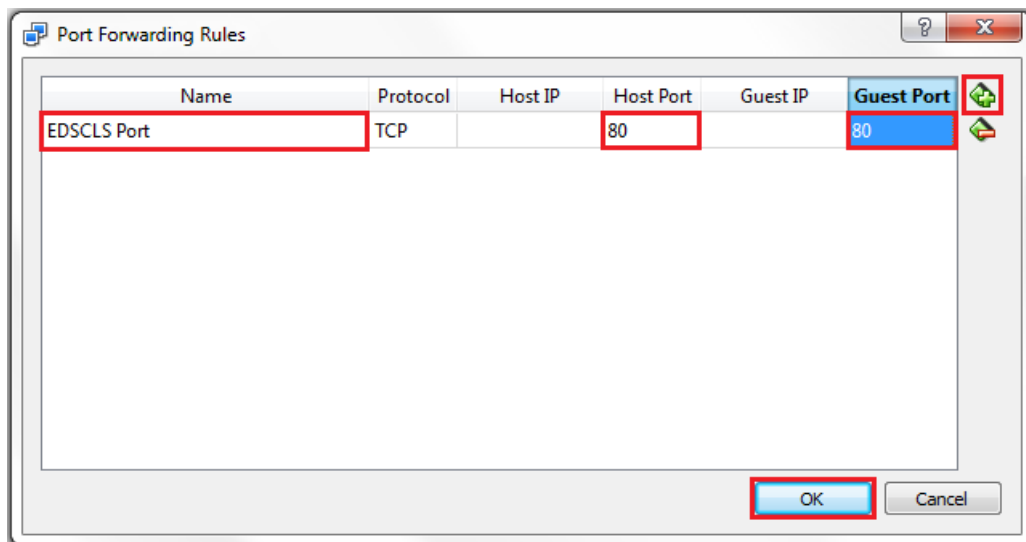
Make sure the EDSCLS virtual machine is selected on the left, then click on the “Settings” button on the main tool bar.



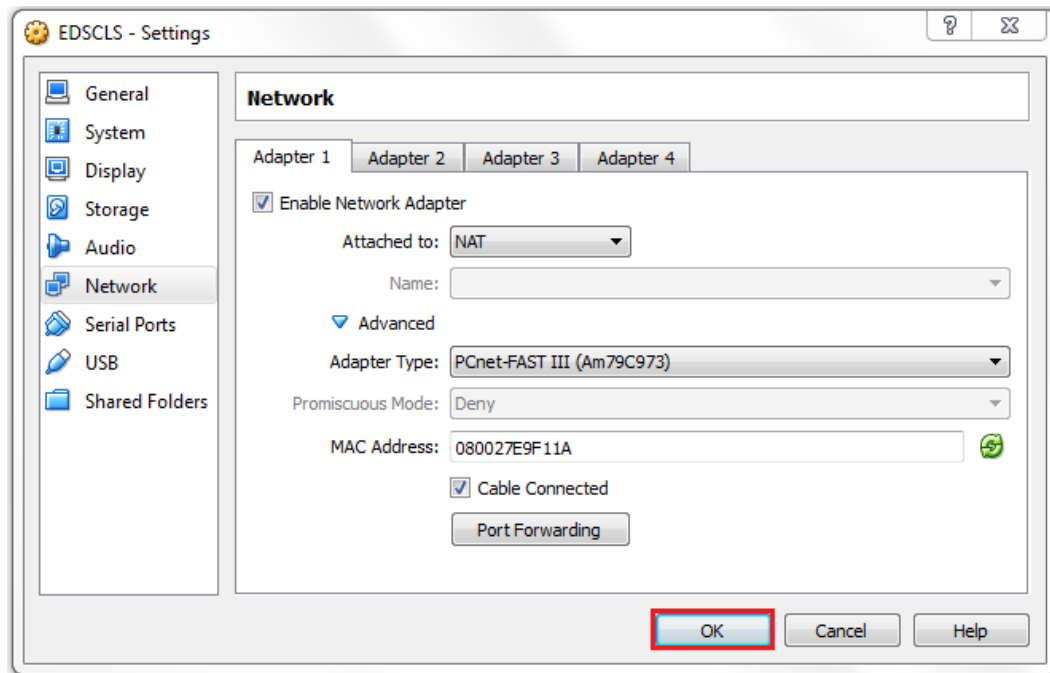
From the Settings window, select “Network” on the left side and click on the “Advanced” *Expand* icon. Select “PCnet-FAST III (Am79C973)” from the “Adapter Type” drop-down box. Click on the “Port Forwarding” button, which will open the Port Forwarding Rules window.



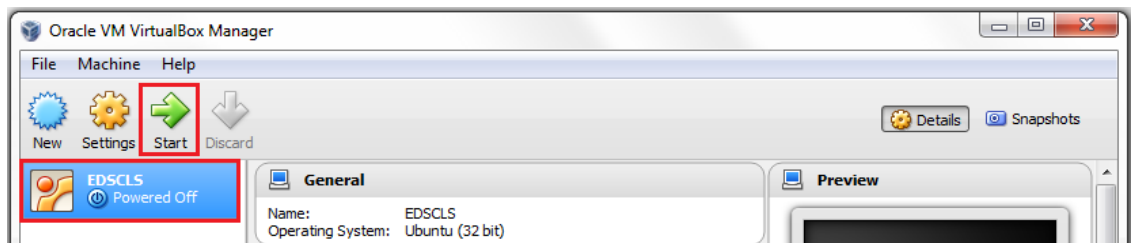
5. From the Port Forwarding Rules window, click on the *Add* icon on the far right to add a new record. Under the “Name” column, enter a descriptive name (e.g., “EDSCLS Port”). Under “Host Port,” enter “80” or specify a different port of your choosing. Under “Guest Port,” enter “80”. Then click on the “OK” button to close the window.



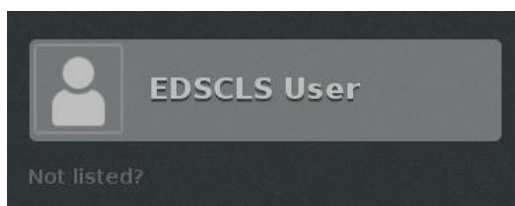
- Click on the “OK” button to close the Settings window.



- To start the EDSCSL virtual machine, make sure it is selected on the left, and then click on the "Start" button on the main tool bar. The machine will take about a minute to boot up.




- To log in to the EDSCSL virtual machine, press the *Enter* key.



9. If you're logging on to the EDSCLS virtual machine for the first time, enter "OsunXiboGyP4x" in the "Password" text box. Otherwise, enter the new password you have chosen. The password will be hidden. Then press the *Enter* key.

The image shows a login window titled "EDSCLS User". It features a user icon on the left. Below the title, the label "Password:" is followed by a text input field containing 16 black dots, indicating a hidden password. At the bottom, there are two buttons: "Cancel" on the left and "Sign In" on the right, separated by a gear icon.

10. If you're logging on to the EDSCLS virtual machine for the first time, enter "OsunXiboGyP4x" again in the "(current) UNIX password" text box. The password will be hidden. Then press the *Enter* key.

The image shows the same "EDSCLS User" login window. The label above the text input field is now "(current) UNIX password:". The input field contains 16 black dots, representing the hidden password. The "Cancel" and "Sign In" buttons remain at the bottom.

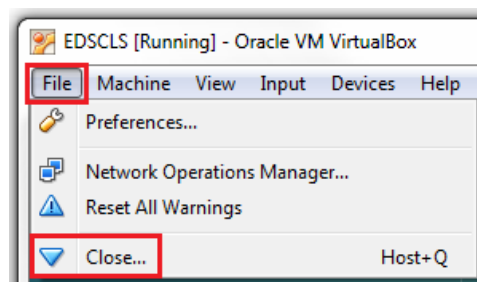
Enter a new password in the "Enter new UNIX password" text box. The password will be hidden. Then press the *Enter* key.

The image shows the "EDSCLS User" login window with the label "Enter new UNIX password:" above the text input field. The input field contains 16 black dots, representing the hidden new password. The "Cancel" and "Sign In" buttons are at the bottom.

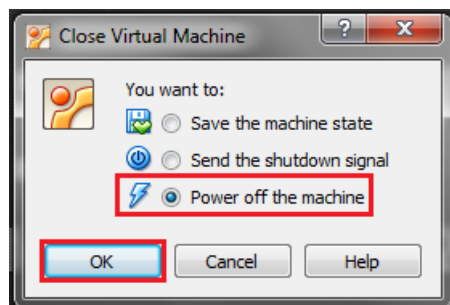
Enter the same new password in the “Retype new UNIX password” text box. The password will be hidden. Then press the *Enter* key.



11. Click on the “File” menu, then select “Close” to power off the EDSCLS virtual machine.



From the Close Virtual Machine window, select “Power off the machine”, then click on the “OK” button.

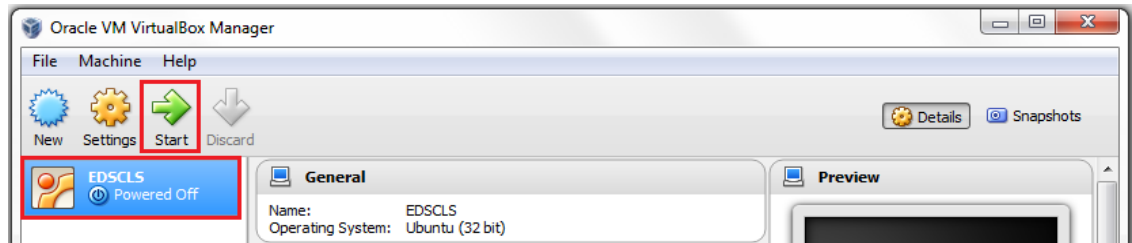


Once the EDSCLS virtual machine has been downloaded, installed, and configured, the following instructions should be performed by a Network/System Administrator, as there may be security and firewall issues involved.

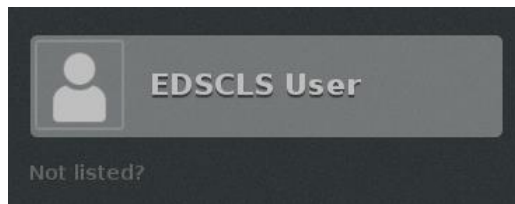
D. To set up the URL and e-mail:

1. Log in to your hosting provider’s web portal and navigate to the DNS section. Create a new record with your domain name without “www” (e.g., “edagency.edu”) and the static IP address of the computer hosting the EDSCLS virtual machine.

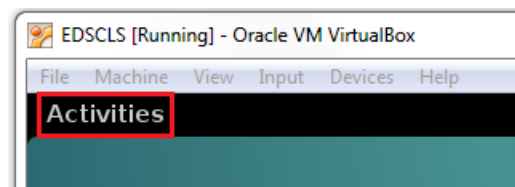
2. To make the domain accessible with “www” at the beginning as well, create a CNAME record with “www” and “@”.
3. To configure your server to send e-mail, create MX records containing information about your e-mail service provider.
4. To configure the hostname and DNS, first, launch Midori to load Webmin.
 - a. Restart the virtual machine from VirtualBox Manager.



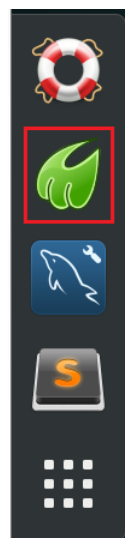
- b. Log in to the EDSCS virtual machine.



- c. Click on the “Activities” link on the upper right hand corner of the desktop.



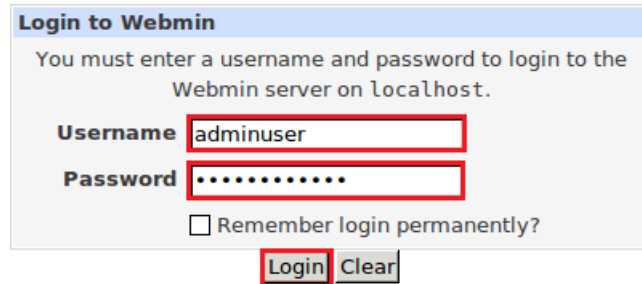
- d. Then click on the *Midori* icon button.



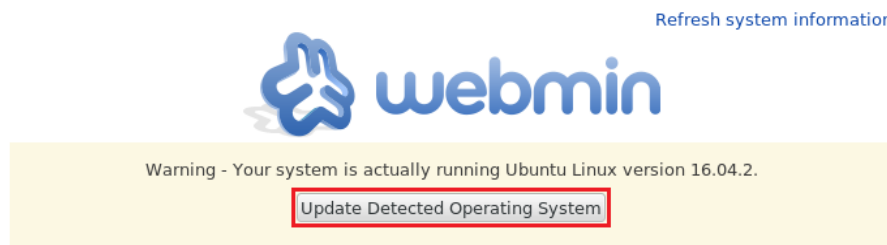
The browser should load Webmin at URL “localhost:10000”. If not, then type it in manually.

Note: If Midori fails to load Webmin, refer to section [2.1.2 Troubleshooting](#).

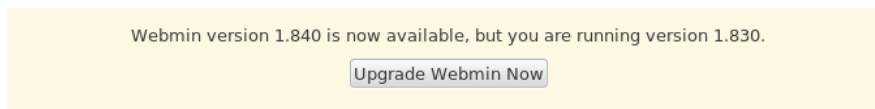
From the Login to Webmin window, enter “adminuser” in the “Username” text box and enter the new password you have chosen in the “Password” text box. The password will be hidden. Then click on the “Login” button.

A screenshot of the 'Login to Webmin' window. It has a blue header with the title 'Login to Webmin'. Below the header, it says 'You must enter a username and password to login to the Webmin server on localhost.' There are two text input fields: 'Username' with 'adminuser' entered and 'Password' with dots. Both fields are highlighted with red boxes. Below the password field is a checkbox labeled 'Remember login permanently?'. At the bottom are two buttons: 'Login' (highlighted with a red box) and 'Clear'.

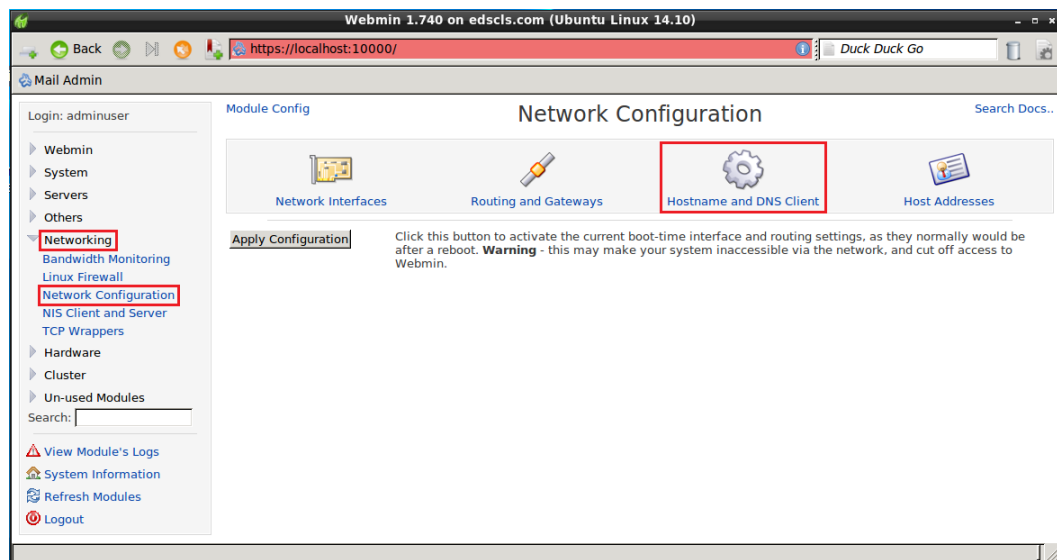
If you are configuring EDSCLS 2.7, click on the “Update Detected Operation System” button.



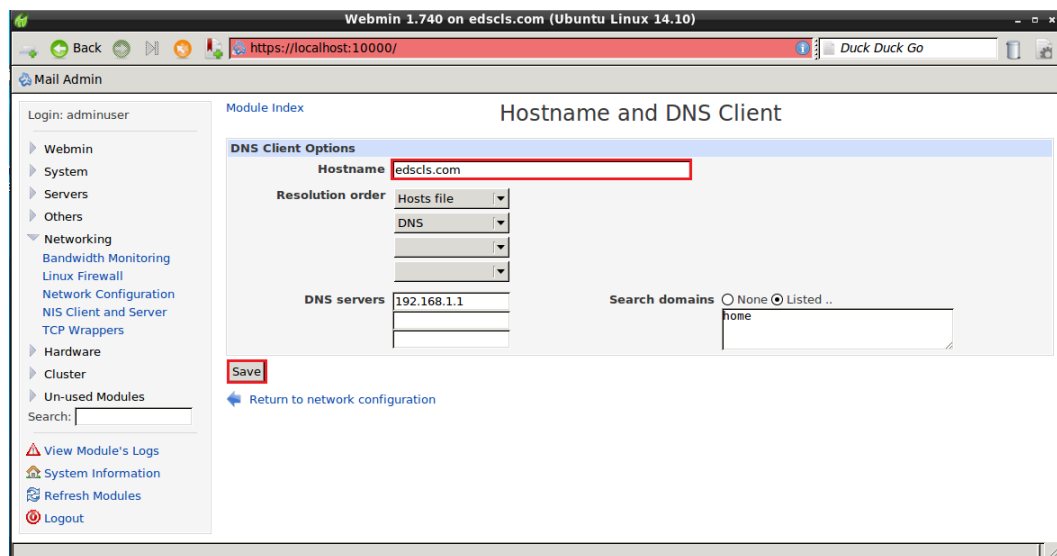
We do NOT recommend clicking on the “Upgrade Webmin Now” button.



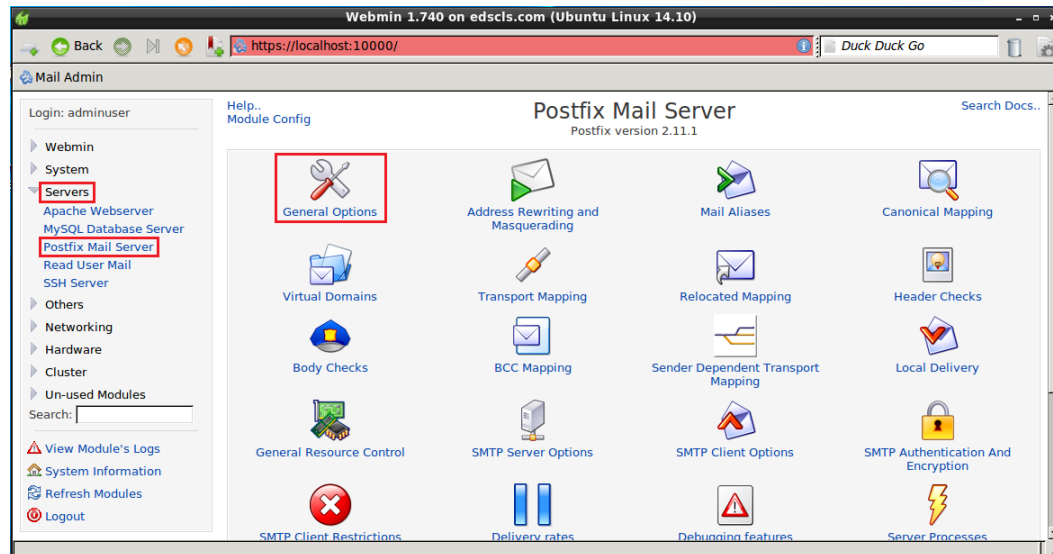
Select “Networking” on the left side; then select “Network Configuration.” Then click on the “Hostname and DNS Client” button.



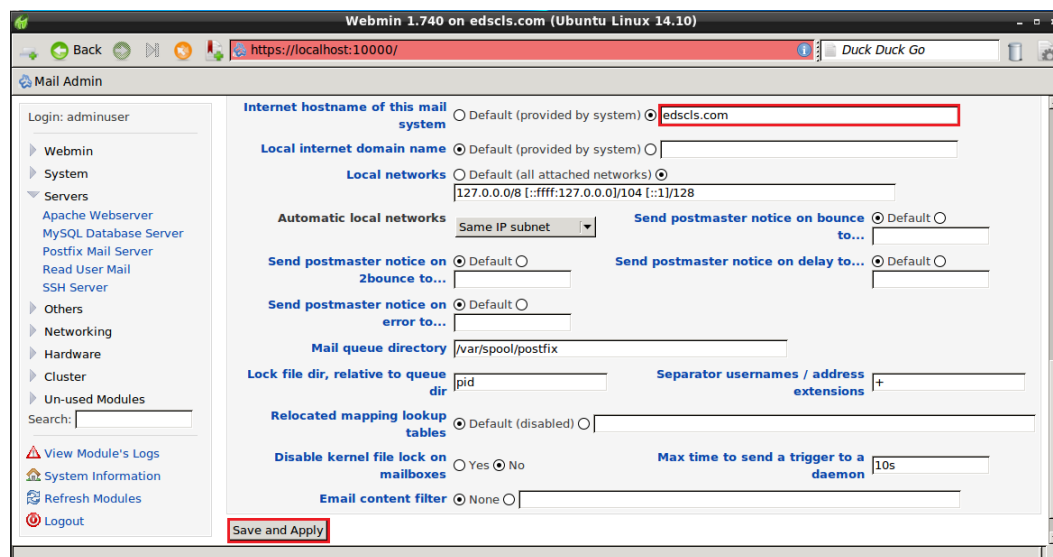
In the “Hostname” text box, replace “edscls.com” with your URL without the “www”. Then click on the “Save” button.



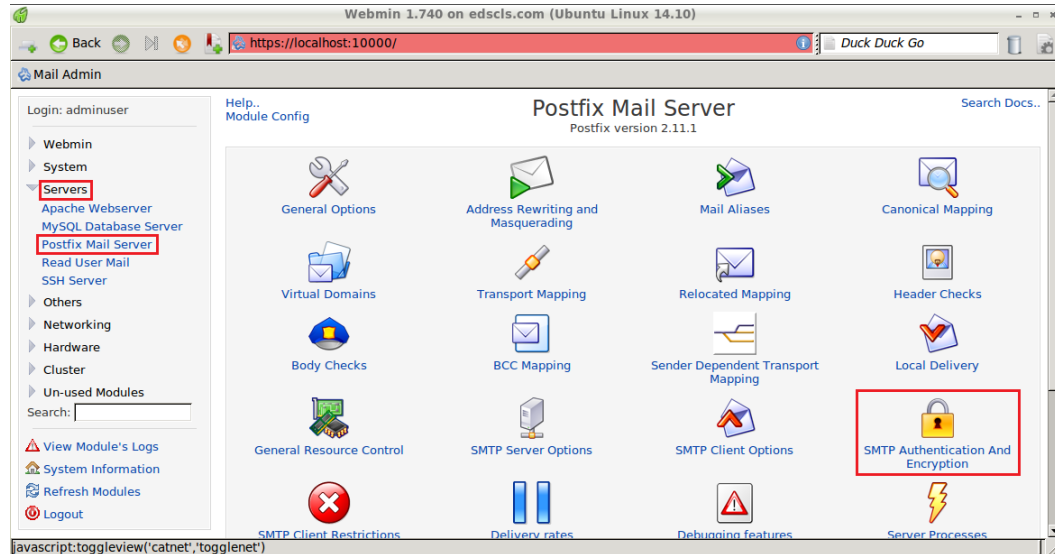
To set the hostname of the mail system, select “Servers” from the menu on the left side of the window; then select “Postfix Mail Server.” Then click on the “General Options” button.



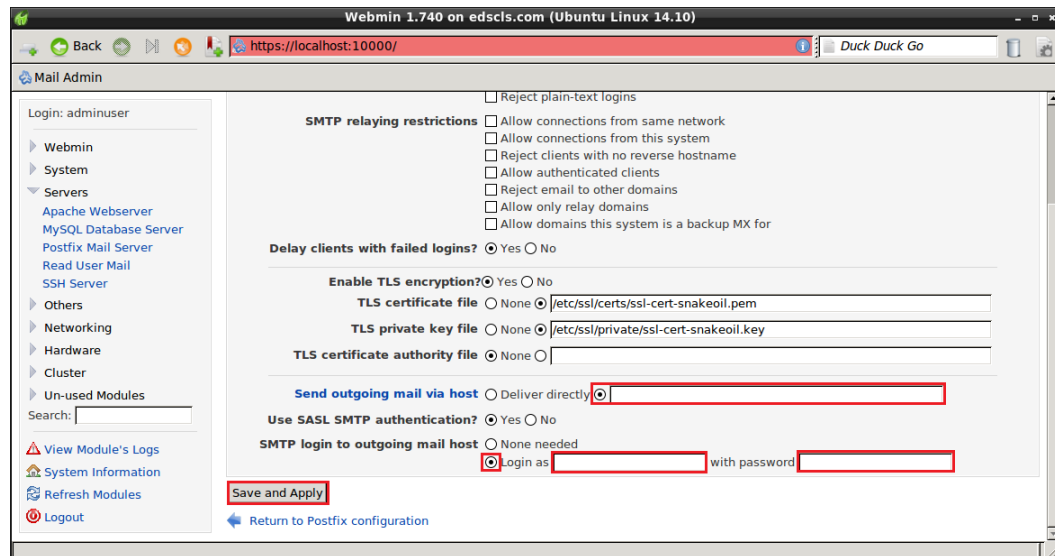
Scroll down and replace “edscls.com” with your URL without the “www” in the “Internet hostname of this mail system” text box. Then click on the “Save and Apply” button.



To configure SMTP mail with your existing mail server, select “Servers” on the left side; then select “Postfix Mail Server.” Then click on the “SMTP Authentication And Encryption” button.



Scroll down. For the “Send outgoing mail via host” radio button, select the second option and enter the SMTP hostname. For the “SMTP login to outgoing mail host” radio button, select the second option. Enter the SMTP host username in the “Login as” text box and enter your SMTP host password in the “with password” text box. Then click on the “Save and Apply” button. If this step is unsuccessful, revert back to the default configuration (i.e., “Deliver directly”, “None needed”).



5. Make sure to provide the Survey Administrator with the URL and e-mail address you created in the steps above.

2.1.2 Troubleshooting

Once installation and configuration is complete, please work closely with the Survey Administrator to ensure that the EDSCLS platform is functioning properly. You may encounter the following issues, and here are some suggested solutions.

A. *If usernames are not being generated:*

1. Delete the data collection in question from the system (see [2.2.4 Data Collection](#)).
2. Restart your server and/or the EDSCLS virtual machine.
3. Recreate the data collection and generate the usernames again.

B. *If e-mails are not being sent:*

1. Repeat the steps under 2.1.1 [D. To set up the URL and e-mail](#): to verify the information entered is correct.
2. Verify your settings with your e-mail service provider.
 - a. You might need to use an IP address if no DNS name is available or resolves.
 - b. Make sure you include the port number they require if not standard. For example, smtp.gmail.com uses port 587.
 - c. You might need to enable (or disable) SASL for use with your provider. In Webmin > Servers > Postfix Mail Server > SMTP Auth & Encryption, for “Use SASL SMTP authentication?” select Yes (or No).
3. Make sure your firewall and virus scanner on the host allows e-mails to be sent from the virtual machine. For example, McAfee needs to have an exception for not preventing Virtualbox.exe to send e-mail.

C. *If Midori reports problems with the signing certificate when loading Webmin:*

1. Close and restart the EDSCLS virtual machine. Alternatively, open a terminal inside the virtual machine and type “reboot”.

Note: There is an intermittent problem reported with Midori that is usually cleared up after a reboot. This will reset the network communications and fix minor filesystem corruption that can happen in a virtual machine that is interrupted by power outage or sudden shutdown.

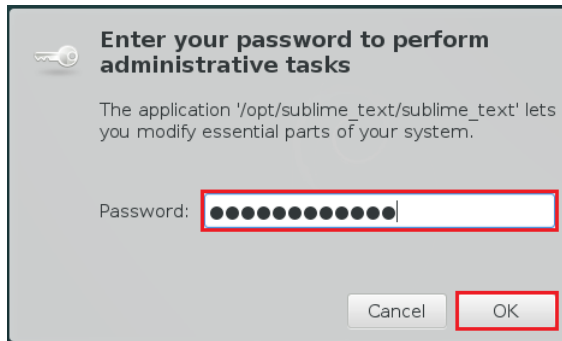
2.1.3 Source Code and Database Access

A. To access the *PHP* source code:

1. Click on the “Activities” link on the upper right hand corner of the EDSCLS virtual machine desktop, then click on the *Sublime* icon button.



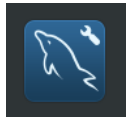
2. Enter the new password you have chosen in the “Password” text box. The password will be hidden. Then click on the “OK” button.



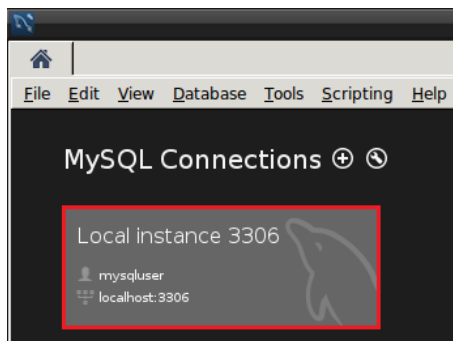
3. Navigate to the files in `/var/www/app`.

B. To access the *MySQL* database:

1. Click on the “Activities” link on the upper right hand corner of the EDSCLS virtual machine desktop, then click on the *MySQL* icon button.



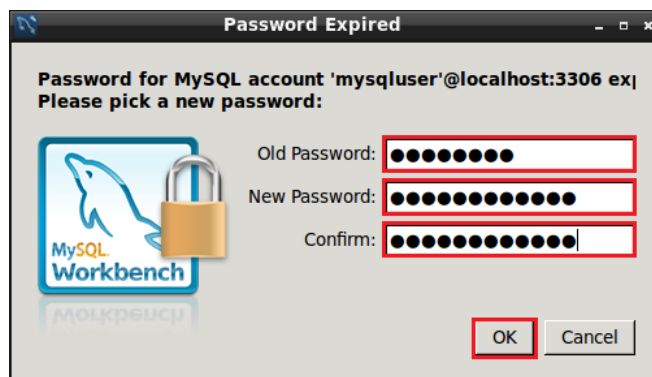
2. Click on the “Local instance 3306” MySQL connection.



3. If you're connecting to "Local instance 3306" for the first time, enter "PpkzDcnj" in the "Password" text box from the connect to MySQL Server window. Otherwise, enter the new password you have chosen. The password will be hidden. Click on the "OK" button to close the window.



4. If you're connecting to "Local instance 3306" for the first time, enter "PpkzDcnj" in the "Old Password" text box from the Password Expired window. Enter a new password in the "New Password" text box. Enter the same new password in the "Confirm" text box. The passwords will be hidden. Then click on the "OK" button.



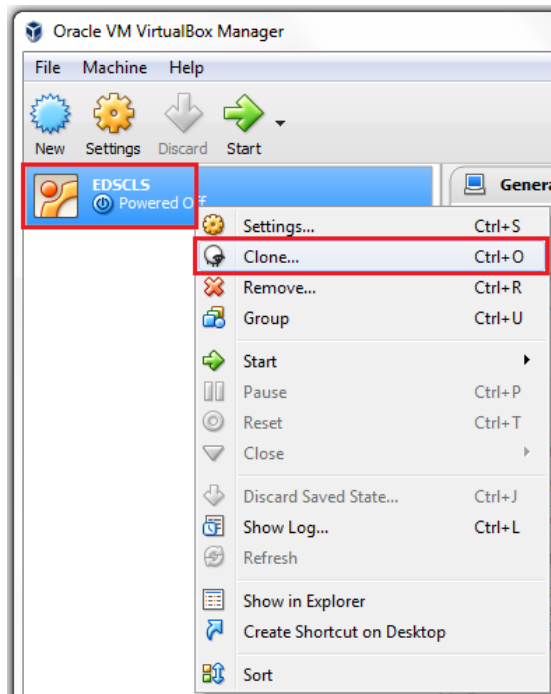
From the Connect to MySQL Server window, enter the new password you have chosen in the "Password" text box. The password will be hidden. Then click on the "OK" button.



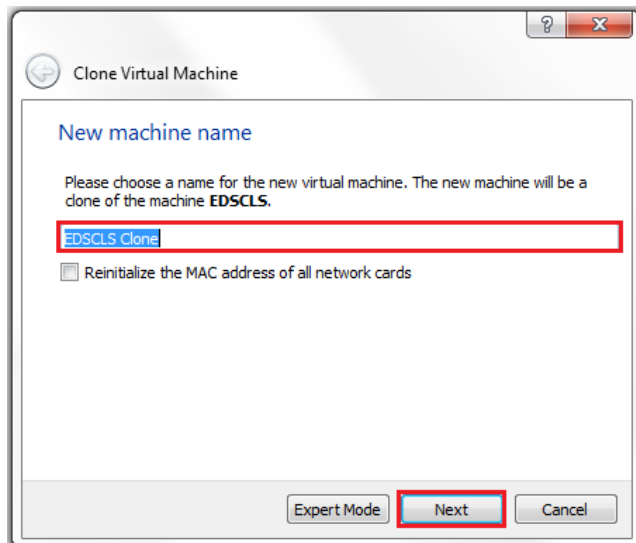
2.1.4 Virtual Machine Back-up

A. To create a back-up/clone of the EDSCLS virtual machine:

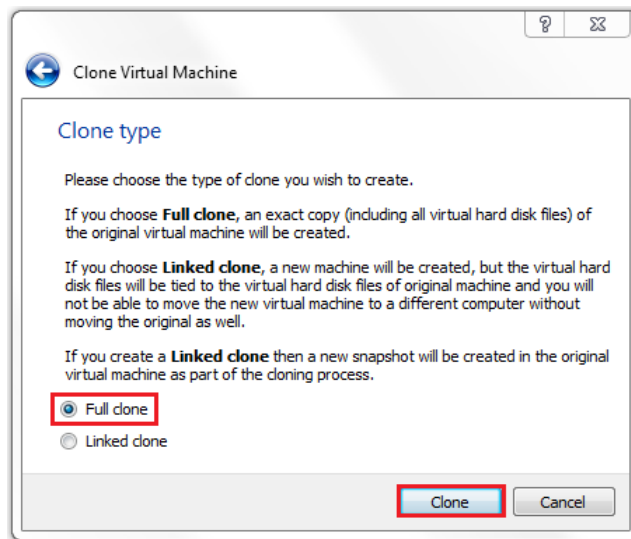
1. From VirtualBox Manager, make sure that the EDSCLS virtual machine has been powered off. Right-click the virtual machine name on the left, then select “Clone”.



2. From the Clone Virtual Machine window, enter a descriptive name for the virtual machine clone (e.g., “EDSCLS Clone”), then click on the “Next” button.



Select “Full clone” for the clone type, then click on the “Clone” button.



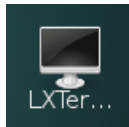
2.1.5 Security Patches and Upgrades

A. To manually apply security patches and upgrades:

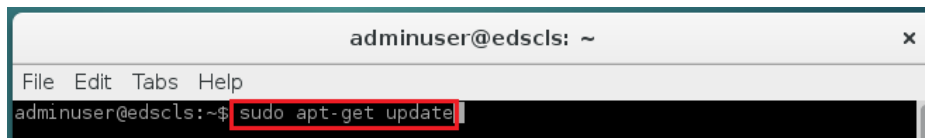
1. Click on the “Activities” link on the upper right hand corner of the EDSCLS virtual machine desktop, then click on the *Show Applications* icon button.



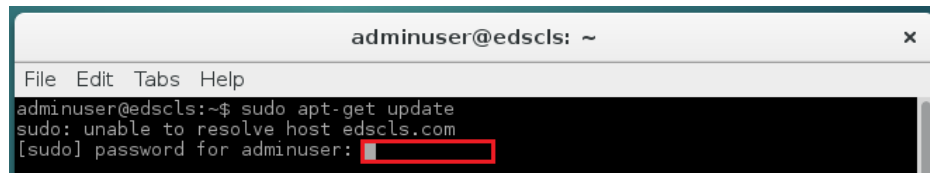
Then click on the LXTerminal button.



2. From the terminal window, enter “sudo apt-get update” at the command line and press the *Enter* key.



3. Enter the new password you have chosen at the command line and press the *Enter* key.



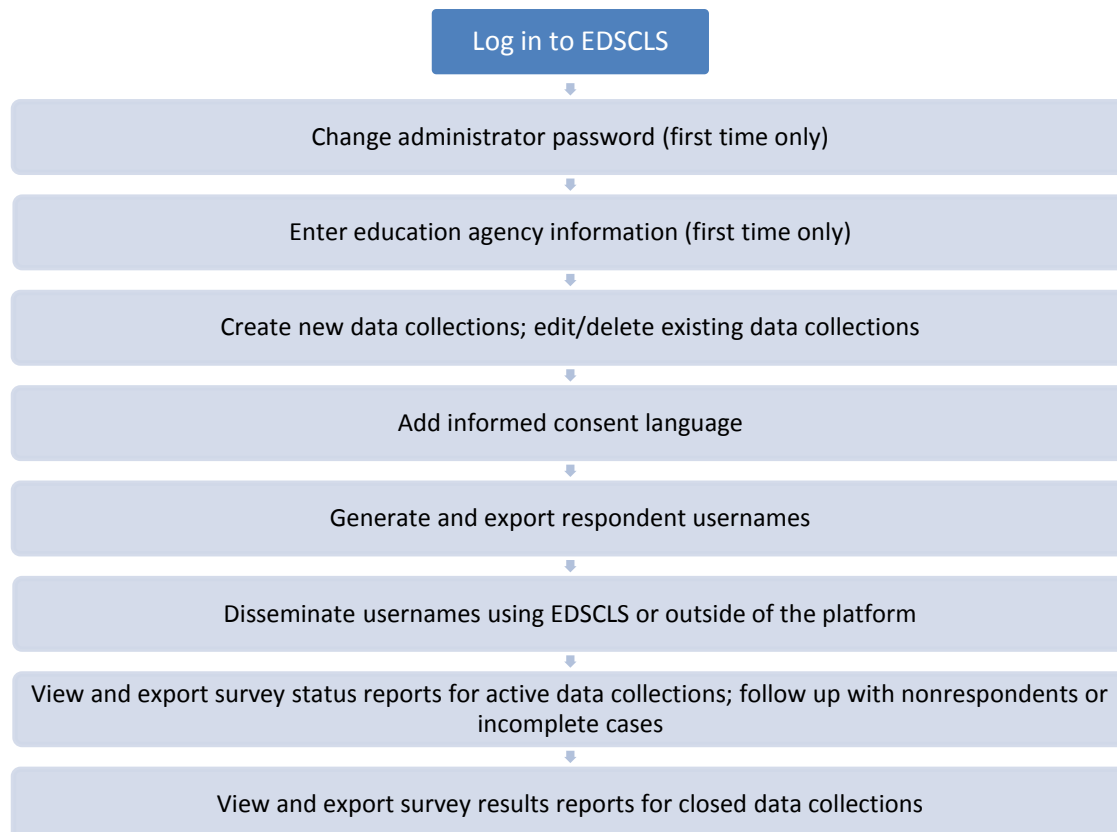
```
adminuser@edscls: ~  
File Edit Tabs Help  
adminuser@edscls:~$ sudo apt-get update  
sudo: unable to resolve host edscls.com  
[sudo] password for adminuser: 
```

4. Enter “sudo apt-get upgrade” at the command line and press the *Enter* key.
5. Enter “sudo apt-get dist-upgrade” at the command line and press the *Enter* key.
6. When asked “Do you want to continue? [Y/n], enter “Y” at the command line and press the *Enter* key.

2.2 EDSCLS Administration

This section is intended for EDSCLS Survey Administrators and covers how to administer the suite of school climate surveys to students, parents/guardians, instructional staff, and noninstructional staff (including principals). Figure 1 below displays the various tasks that Survey Administrators will use the dashboard to carry out during the survey planning, administration, and post-administration phases of the EDSCLS. Each of these tasks is explained in more detail throughout this section.

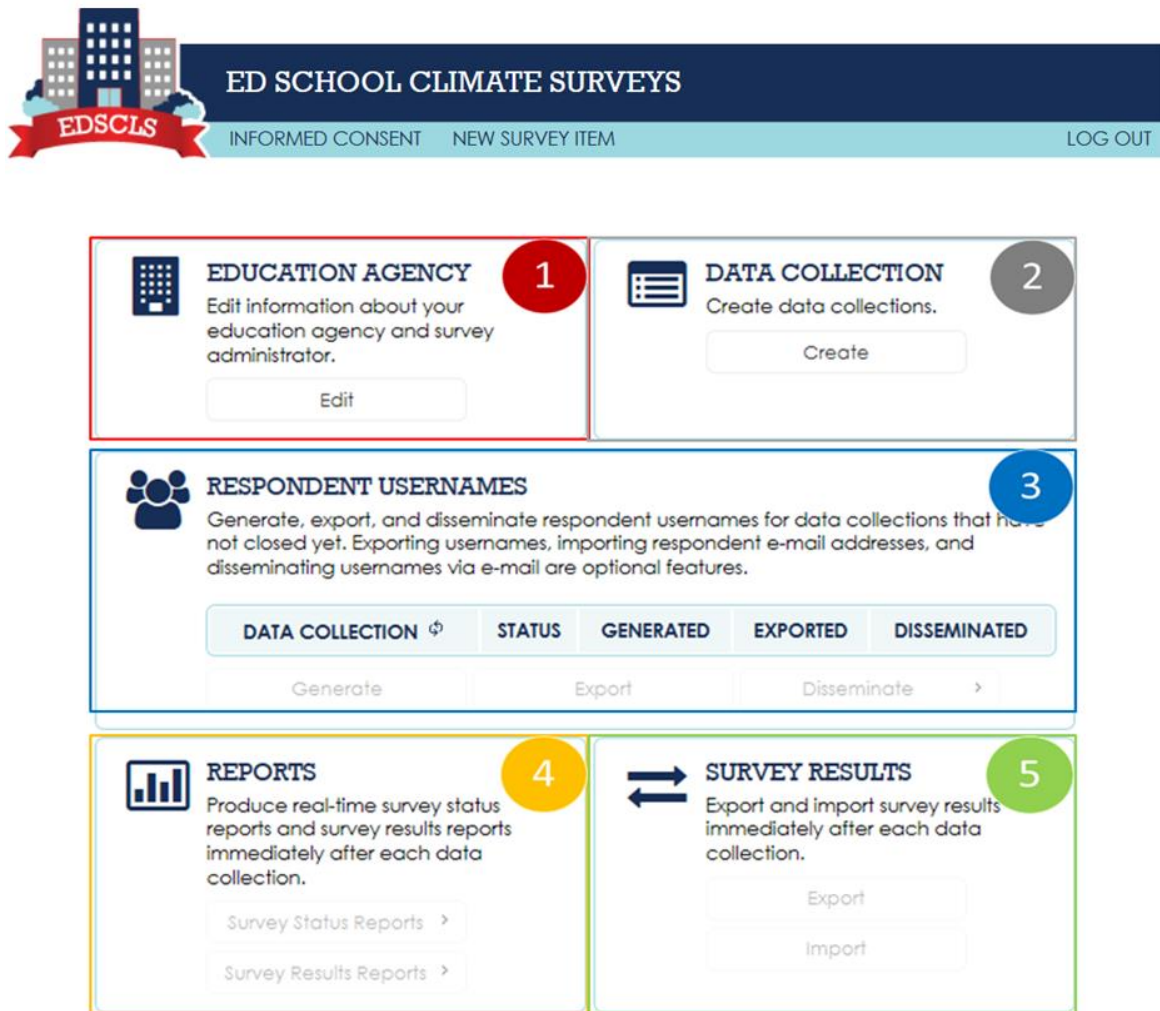
Figure 1. EDSCLS Survey Administrator Tasks



2.2.1 EDSCLS Administrator Dashboard

Once the survey platform has been installed and configured by IT staff, Survey Administrators will have access to the “Survey Administrator dashboard,” which will be their control center throughout the survey process and where each of the tasks displayed in figure 1 can be executed. Figure 2 below displays the dashboard.

Figure 2. EDSCLS Survey Administrator Dashboard



The Survey Administrator dashboard is divided into five main boxed sections. The dashboard allows the Survey Administrator to perform the following tasks:

- 1 edit information about the education agency administering the survey and the Survey Administrator;
- 2 create, edit, and delete data collections;
- 3 generate, export, and disseminate random usernames for each respondent group;

4 produce various types of reports, including real-time survey status reports during data collection and survey results reports immediately after data collection; and

5 export and import survey results.

Additionally, the dashboard allows Survey Administrators to add appropriate informed consent language directly into the EDSCLS surveys. The EDSCLS includes default informed consent language to provide respondents with information about the study and their rights to participate. They can also choose to not participate after reading the information. Survey Administrators can modify the prefilled language based on the needs of their education agency. For the student survey, Survey Administrators need to add confidentiality language that is consistent with the Family Educational Rights and Privacy Act (FERPA) and state laws and that takes into account whether or not student response data will be linked to external data. This feature can be accessed via the “INFORMED CONSENT” link found on the home page of the dashboard.



Survey Administrators also have the ability to add new survey items to the end of the pre-set EDSCLS items by clicking on the “NEW SURVEY ITEM” link found on the home page of the dashboard. Survey results for new items will not be displayed in any reports within the platform; however, Survey Administrators will be able to export the data for analysis outside of the platform.










It is strongly recommended that Survey Administrators conduct a test run of the survey process prior to survey administration. Test runs should be done for all surveys, but more planning is needed for the student survey (securing rooms in which to administer the survey, assigning proctors, distributing log-in information, etc.). Please see more details in [3.4 Test Runs Prior to Administration](#). The test run familiarizes Survey Administrators with the full capabilities of the dashboard and equips them to address any issues that may arise during active data collections. For example, the survey status reports function allows Survey Administrators to monitor real-time submission rates,⁶ a useful feature that can be used to identify respondent groups with low submission rates. Nonresponse follow-up efforts (e.g., e-mail reminders) can then be implemented to increase participation rates.

Administrators may want to use figure 2 above to follow along with the directions below. Alternatively, if IT staff have already downloaded and installed the EDSCLS package, administrators may want to follow along with the real dashboard open on their computer.

⁶ The submission rate is calculated as the number of surveys completed (i.e., submitted to the EDSCLS system) divided by the number of usernames randomly generated by the system.

The icon button key below shows the icon symbols that are referenced throughout this guide.

ICON BUTTON KEY:	
	Save
	Delete
	Information
	Expand
	Collapse
	Add
	Refresh

2.2.2 Authentication

Before beginning to use the features of the dashboard, the Survey Administrator must first log in. Step-by-step instructions on how to log in to the dashboard are provided in this section.

A. *To log in to the Survey Administrator Dashboard:*

1. Open the EDSCLS website from a browser. Your IT staff will have created this website for you and should have provided you with the URL.
2. From the home page, click on the “>> ADMINISTRATOR LOG IN” link from the toolbar on the home page.



Alternatively, users can enter “sclsadmin” in the “Username” text box and click on the “LOG IN” button.

3. Enter “sclsadmin” in the “Username” text box.

Administrators: If this is the first time you are logging in, please use the username and temporary password provided to you. If you have previously logged on, please enter your username and password to enter the data management platform. The session will time out if left idle for more that 10 minutes.

Username:	<input type="text"/>	
Password:	<input type="password"/>	Reset Password
<input type="button" value="LOG IN"/>		

4. If you are logging in for the first time, enter the temporary password “2@Password” in the “Password” text box. Otherwise, enter the new password you have chosen.
5. If you are logging in for the first time, read the Pledge of Confidentiality. Then check the “I have read and agree to the Pledge of Confidentiality” check box.

I hereby certify that I have carefully read and will cooperate fully with the EDSCLS procedures on confidentiality. I will keep completely confidential all information arising from surveys concerning individual respondents to which I may gain access. I will not discuss, disclose, disseminate, or provide access to survey data and identifiers. I will devote my best efforts to ensure that there is compliance with the required procedures by personnel whom I supervise. I give my personal pledge that I shall abide by this assurance of confidentiality.



I have read and agree to the Pledge of Confidentiality.

6. Click on the “LOG IN” button.

After logging in for the first time, you will be redirected to the Change Password page and required to specify a password that is different from the default administrator password.

B. To change the password:

1. Enter a new password in the “New Password” text box.
2. Enter the same new password in the “Retype New Password” text box.
3. Passwords will automatically be hidden when entered. To reveal the password characters, check the “Show Password” check box.
4. Click on the “SAVE” button.

Administrator passwords must be between 8 and 14 characters in length and contain

- 1 uppercase English character,
- 1 lowercase English character,
- 1 numeric character, and
- 1 special character

C. To reset the password or if you have forgotten your password:

1. Click on the “>> ADMINISTRATOR LOG IN” link from the toolbar on the home page.
2. Enter “sclsadmin” in the “Username” text box.
3. Click on the “Reset Password” link.
4. An e-mail with a URL to reset the password will be sent to the e-mail address of the Survey Administrator specified on the Education Agency page (see [2.2.3 Education Agency](#) below). Click on the URL, or copy and paste the URL directly from the e-mail into a browser address bar to be taken to the Reset Password page.
5. Follow the instructions in the “To change the password” section above.

D. To log out:

1. Click on the “LOG OUT” link in the toolbar.

2.2.3 Education Agency

After logging in for the first time and changing your temporary password, you will be directed to the Education Agency page and prompted to enter information about the education agency that is hosting the EDSCLS surveys. This only needs to be done once, regardless of how many data collections are opened.

A. *To enter the education agency information:*

1. Select the level of the education agency from the “Level” drop-down box (state, school district, or school).

NOTE

If your education agency spans multiple schools in one district, select the “District” level. If your education agency crosses district lines, select the “State” level.

2. **If a state education agency is hosting the EDSCLS survey**, select the state from the “State” drop-down box.

NOTE

At the state level, the level and state cannot be changed once the “SAVE” button has been clicked.

If a school district is hosting the EDSCLS survey, enter the school district’s 7-digit NCES district ID in the “NCES ID” text box. If you do not know the district’s NCES ID, click on the “Find Your District ID” link to be redirected to the NCES Public School District Locator.

If an individual school is hosting the EDSCLS survey, enter the school’s 12-digit NCES school ID in the “NCES ID” text box. If you do not know the ID, click on the “Find Your School ID” link to be redirected to the NCES Public School Locator. This function is not available for private schools.

If your education agency does not show up in the NCES Public School District Locator or the NCES Public School Locator, please set up the data collection at the “District” level and select the district nearest to yours, and then manually change the name of the education agency.⁷ Please see section 2.2.7

B. To add a school to the data collection (district- and state-level hosts only): for more details about adding schools not included in the NCES public school directory.

⁷ Note that you can also use this workaround to create custom data collections. For example, if you have a school spanning middle and high school students, you may want to create a district-level collection and treat the middle school students and their teachers as a separate school from the high school students and teachers. You can also use this workaround if your school is a private institution or newly formed.

3. In the Education Agency section, the name of the education agency is automatically prefilled. To modify the name of the education agency, enter another name in the “Name” text box.

EDUCATION AGENCY
Name:

SURVEY ADMINISTRATOR
Name:
E-mail:
Phone: () - ext.

4. In the Survey Administrator section, enter the name of the Survey Administrator in the “Name” text box.

EDUCATION AGENCY
Name:

SURVEY ADMINISTRATOR
Name:

E-mail:
Phone: () - ext.

5. Enter the e-mail address of the Survey Administrator in the “E-mail” text box.

NOTE

It is recommended that you use an e-mail address that was created specifically for the purpose of administering the survey (e.g., EDSCLS@edagency.edu).

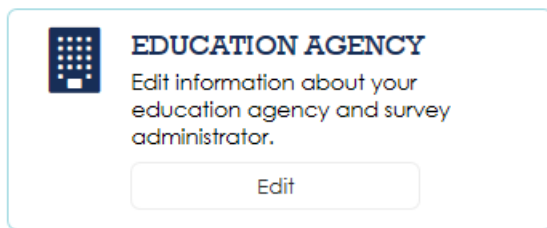
6. Enter the phone number of the Survey Administrator in the “Phone” text box.

NOTE

The Survey Administrator’s name, e-mail address, and phone number will be displayed on the home page for all survey participants. Participants rely on this information to contact the Survey Administrator. Please make sure it is accurate.

7. Click on the “SAVE” button to save information about the education agency.

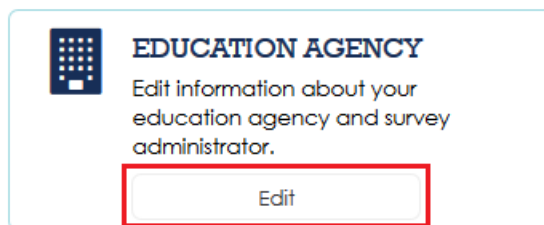
Once the education agency information has been saved for the first time, you will be directed to the dashboard. On the top left of the dashboard, you will see a section called “Education Agency.”



The Survey Administrator can use this section to edit information about the education agency at any time. For example, the name and contact information for the Survey Administrator that is provided to respondents can be updated. If an education agency administers the EDSCLS multiple times (for example, once each year), the Survey Administrator information should be reviewed for currency and accuracy prior to each round of data collection.

B. To edit the education agency information:

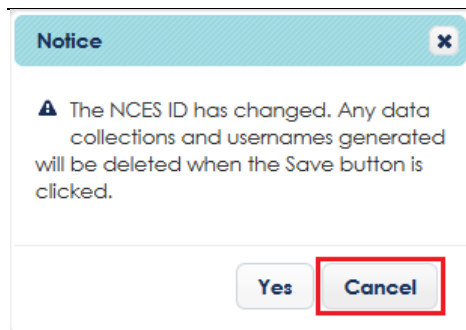
1. In the Education Agency section, click on the “Edit” menu button.



2. Edit the education agency and/or Survey Administrator information as instructed above in [2.2.3 Education Agency A](#). To enter the education agency information

WARNING

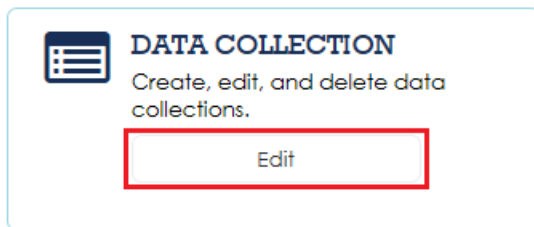
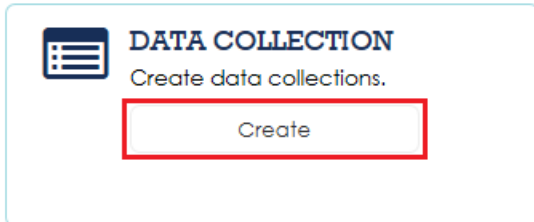
At the district and school levels, if the NCES ID is changed, any data collections, usernames generated, and data collected will be deleted when the “SAVE” button is clicked. A warning box will pop up asking the user to confirm the change. Click “Cancel” in the warning box if the change was accidental. Click “Yes” if you want to delete the old data collection and start afresh.



3. Click on the “SAVE” button.

2.2.4 Data Collection

On the top right of the dashboard, you will see a section called “Data Collection.” This is the part of the dashboard that Survey Administrators can use to open, close, and delete data collections. Note that, if there are no open data collections, only one data collection box will appear in your platform and it will have a “Create” button. However, if one or more data collections have already been created, an additional data collection box will be present and it will have an “Edit” button, as shown below.



A. To create a new data collection:

1. In the Data Collection section, click on the “Create” button.
2. Click on the “START DATE” text box/date selector located on the top blank row. Enter the start date of the data collection, or select the start date from the date selector.

DATA COLLECTION	START DATE	END DATE	RESPONDENT GROUP	STATUS
	<input type="text"/>	<input type="text"/>	... ▼	

NOTE

The start date must be today’s date or later.

Refer to section [3.2 Setting Dates for the Survey Administration Window](#) for guidelines to consider when setting the data collection start and end dates.

3. Click on the “END DATE” text box/date selector. Then enter the end date of the data collection, or select the end date from the date selector.

NOTE

The end date cannot be earlier than the start date. A data collection will close on the end date at 11:59 p.m.

4. Select the respondent group from the “RESPONDENT GROUP” drop-down box. A unique data collection name is created based on the start date, end date, and respondent group.

5. Click on the *Save* icon.

NOTE

Once a data collection has been created, the status is marked as “Not Started” until the date entered as the start date arrives, at which time the status will show as “Started.” The status will change to “Closed” at 11:59 p.m. on the specified end date.

Multiple data collections can be created; however, the start date, end date, and respondent group must be unique. For example, two student surveys cannot be opened at the same time with the same start date and same end date.

B. To edit a data collection:

1. Edit the start date and/or end date of a data collection.
2. Click on the *Save* icon of the data collection to save the changes.

C. To delete a data collection:

1. Click on the *Delete* icon of the data collection to be deleted.

2.2.5 Informed Consent

The EDSCLS includes default informed consent language to provide respondents with information about the study and their rights to choose to participate or not to participate. Survey Administrators can modify the language on this page based on the needs of their school, district, or state. For the student survey, Survey Administrators need to add confidentiality language that is consistent with FERPA and state laws and that takes into account whether or not student response data will be linked to external data.

NOTE

The Protection of Pupil Rights Amendment’s (PPRA) active consent requirement applies only to data collections conducted by the federal government. While the EDSCLS was developed by the U.S. Department of Education (ED), ED does not collect the data nor does it have access to the data. Therefore, only state and local consent requirements apply.

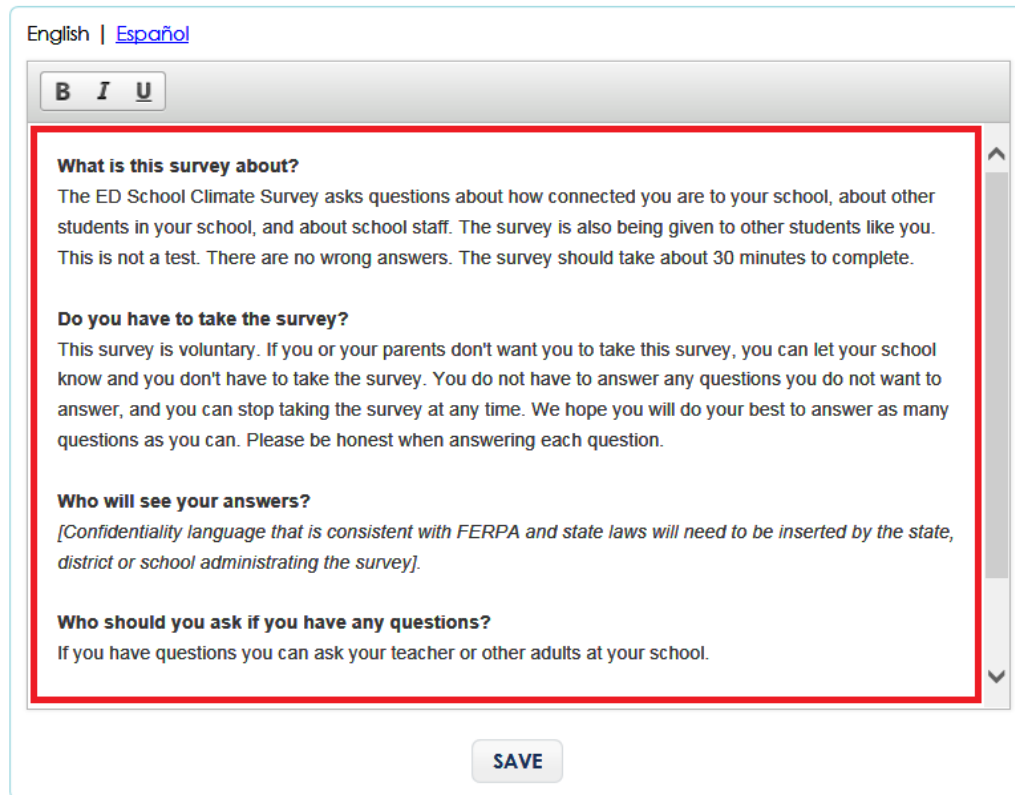
A. To edit the informed consent language:

1. Click on the “INFORMED CONSENT” link on the toolbar of the dashboard.



2. Select the respondent group from the “Respondent Group” drop-down box.

3. Edit the prefilled informed consent language in the text area.⁸ For the student respondent group, replace “[Confidentiality language that is consistent with FERPA and state laws will be inserted by the district or school administrating the survey]” with confidentiality language that is consistent with FERPA and state laws.



The screenshot shows a web-based text editor. At the top, there are language tabs for "English" and "Español". Below these are three formatting icons: "B" (Bold), "I" (Italic), and "U" (Underline). The main text area contains the following content:

What is this survey about?
The ED School Climate Survey asks questions about how connected you are to your school, about other students in your school, and about school staff. The survey is also being given to other students like you. This is not a test. There are no wrong answers. The survey should take about 30 minutes to complete.

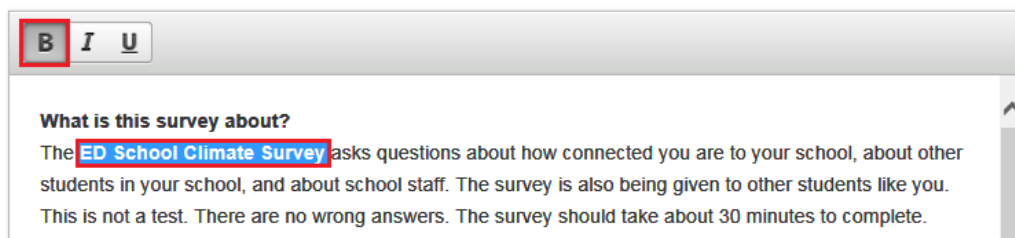
Do you have to take the survey?
This survey is voluntary. If you or your parents don't want you to take this survey, you can let your school know and you don't have to take the survey. You do not have to answer any questions you do not want to answer, and you can stop taking the survey at any time. We hope you will do your best to answer as many questions as you can. Please be honest when answering each question.

Who will see your answers?
[Confidentiality language that is consistent with FERPA and state laws will need to be inserted by the state, district or school administrating the survey].

Who should you ask if you have any questions?
If you have questions you can ask your teacher or other adults at your school.

At the bottom of the text area is a "SAVE" button.

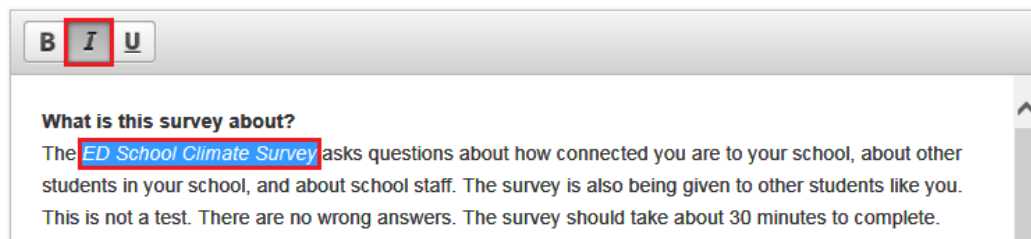
4. To set text in bold, select the text and click on the *Bold* icon.



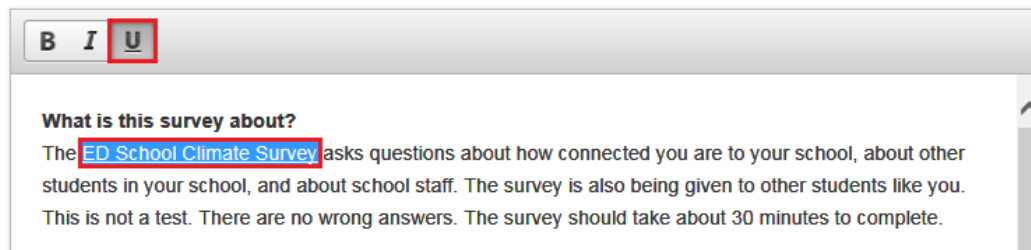
This screenshot shows the same text editor interface as the previous one. The "B" (Bold) icon in the top toolbar is now highlighted with a red square. In the text area, the words "ED School Climate Survey" in the first paragraph are highlighted with a blue selection box.

⁸ Only one version of the consent language can be used in surveys for the same respondent groups conducted during the same data collection window.

5. To italicize text, select the text and click on the *Italicize* icon.



6. To underline text, select the text and click on the *Underline* icon.



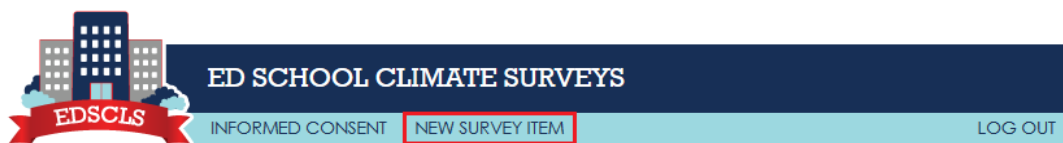
7. To toggle between the English and Spanish versions of the consent language for student and parent respondent groups, click on the “English” and “Español” links.
8. Click on the “SAVE” button to save the informed consent language.

2.2.6 New Survey Items⁹

Additional survey items can be inserted at the end of the EDSCLS survey items, edited, and deleted as long as there are **no open data collections** for a specified respondent group. The data for new survey items will not be included in the survey results reports ([Section 2.2.9.2](#)). To access new survey item data, you will need to export respondent level results ([Section 2.2.10](#)). Also, new survey item data cannot be imported into other data collections.

A. To add a new survey item:

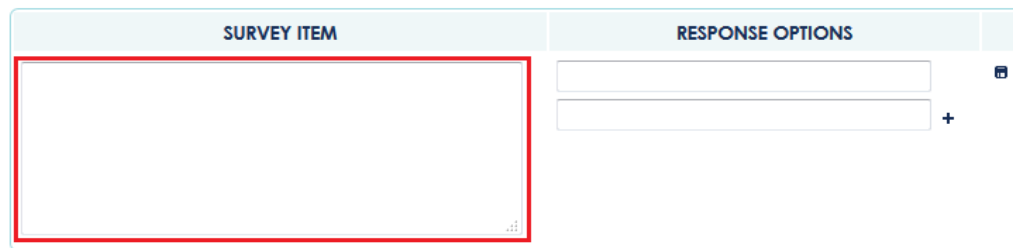
1. Click on the “NEW SURVEY ITEM” link on the toolbar of the dashboard.



2. Select the respondent group from the “Respondent Group” drop-down box.

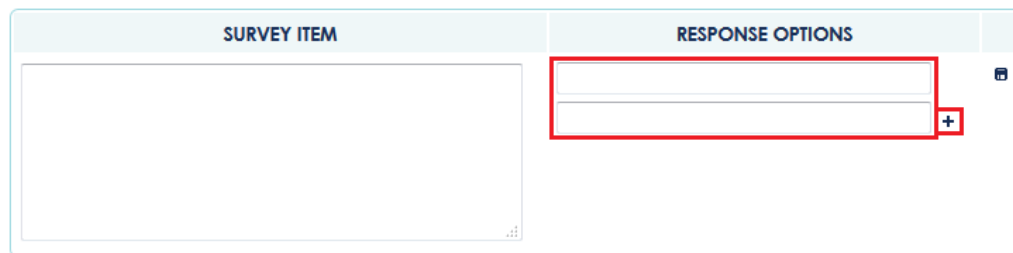
⁹ “Item” is the standard term used in place of “question” in survey parlance.

3. Enter the new survey item in the “SURVEY ITEM” text area.



The screenshot shows a form with two main sections: "SURVEY ITEM" and "RESPONSE OPTIONS". The "SURVEY ITEM" section is on the left and contains a large text area, which is highlighted with a red border. The "RESPONSE OPTIONS" section is on the right and contains two text boxes, one of which is highlighted with a red border. A plus sign icon is visible next to the second text box in the "RESPONSE OPTIONS" section.

4. Enter at least 2 response options in the “RESPONSE OPTIONS” text boxes. To insert additional response options, click on the *Add* icon.



The screenshot shows the same form as before, but now the "RESPONSE OPTIONS" section is highlighted with a red border. The "SURVEY ITEM" text area is still visible but not highlighted. The plus sign icon next to the second text box in the "RESPONSE OPTIONS" section is also highlighted with a red border.

NOTE

Response options that are left blank will be removed when the new survey item is saved.

5. Click on the *Save* icon to save the new survey item.

B. To edit a survey item:


1. To edit the survey item, delete the current text and retype the new text in the “SURVEY ITEM” text area.
2. To edit the response options, delete the current text and retype the new text. Enter at least 2 response options in the “RESPONSE OPTIONS” text boxes. To insert additional response options, click on the *Add* icon.
3. Click on the *Save* icon.

C. To delete a survey item:

Click on the *Delete* icon of the survey item to be deleted.

2.2.7 Respondent Usernames Generation

In the center of the dashboard’s main page, you will see a box titled “RESPONDENT USERNAMES.” Respondent usernames are generated randomly from the EDSCLS platform for each respondent group such that, when a respondent enters the username into the survey platform, he or she will be directed automatically to the appropriate survey (i.e., student, instructional staff, noninstructional staff including principals, or parent/guardian). Through this section of the Survey Administrator dashboard, these random usernames can be generated and exported.



RESPONDENT USERNAMES

Generate, export, and disseminate respondent usernames for data collections that have not closed yet. Exporting usernames, importing respondent e-mail addresses, and disseminating usernames via e-mail are optional features.

DATA COLLECTION \$	STATUS	GENERATED	EXPORTED	DISSEMINATED
12/02/2014-12/19/2014:Students	Started	✓	✓	✗

Generate

Export

Disseminate >

The dashboard also provides Survey Administrators with an option to disseminate these random usernames to respondents' e-mail addresses. In order to use this option, Survey Administrators must upload respondent e-mail addresses into the EDSCLS platform and use the EDSCLS to send individual survey invitations to respondents.

For each data collection, administrators will need to generate usernames for each respondent group in each school. This allows the EDSCLS platform to track and display survey submission statuses by school, which is an important tool in ensuring the success of a data collection.

The Respondent Usernames section of the dashboard includes the following functionalities:

- **Generate** – Create usernames for a data collection
- **Export** – Save the list of generated usernames as a single CSV (comma-separated or character-separated values) file or multiple CSV files
- **Disseminate** – Import usernames and e-mail addresses into the EDSCLS platform for a data collection and disseminate survey invitations via the e-mail tool in the EDSCLS

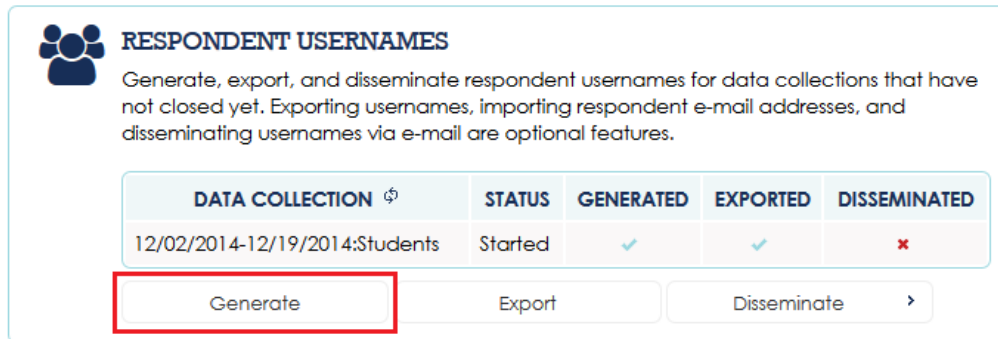
The general process works as follows. Survey Administrators use the EDSCLS to generate a certain number of usernames for each school. If multiple schools in a district or state are participating in the EDSCLS, usernames are generated for each school. Survey Administrators then export the randomly generated usernames in a CSV file(s), which can be opened with a text editor or Excel, where each username can be paired with a respondent's e-mail address. With that done, Survey Administrators can then import the newly appended CSV file back into the EDSCLS platform. The end result is that the administrator can use the platform to send each respondent an e-mail with a unique username and an invitation to participate in the EDSCLS.

This section of the dashboard also provides the status of each data collection that has not yet closed, and tracks whether usernames have been generated, exported, and disseminated.

See [Appendix B](#) for more information on the role of the username dissemination feature in an EDSCLS administration.

A. To generate usernames:

1. In the Respondent Usernames section, click on the “Generate” menu button.



RESPONDENT USERNAMES

Generate, export, and disseminate respondent usernames for data collections that have not closed yet. Exporting usernames, importing respondent e-mail addresses, and disseminating usernames via e-mail are optional features.

DATA COLLECTION	STATUS	GENERATED	EXPORTED	DISSEMINATED
12/02/2014-12/19/2014:Students	Started	✓	✓	✗

Generate Export Disseminate


Alternatively, click on the “GENERATE” link from the toolbar on any Respondent Usernames page.



ED SCHOOL CLIMATE SURVEYS

EDSCLS ADMIN HOME GENERATE EXPORT DISSEMINATE LOG OUT

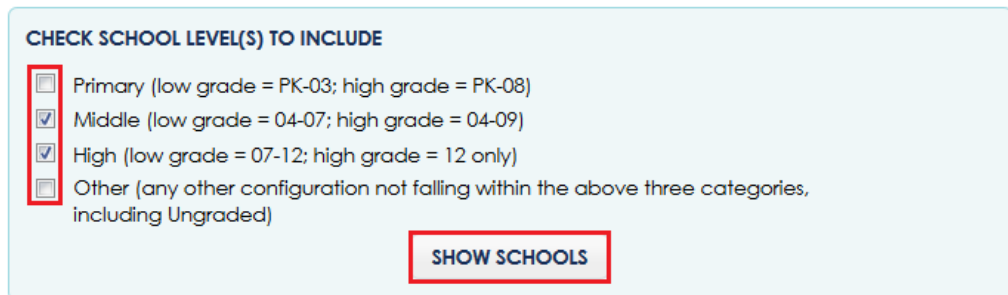
2. First, identify the data collection for which usernames are being generated. Select the data collection from the “Data Collection” drop-down box.



SELECT DATA COLLECTION

Data Collection: ...

3. Create a list of participating schools (district- or state-level Survey Administrators only¹⁰):
 - a. To generate a prefilled list of schools within the state or district, check at least one school level. Click on the “SHOW SCHOOLS” button.



CHECK SCHOOL LEVEL(S) TO INCLUDE

☐ Primary (low grade = PK-03; high grade = PK-08)

☒ Middle (low grade = 04-07; high grade = 04-09)

☒ High (low grade = 07-12; high grade = 12 only)

☒ Other (any other configuration not falling within the above three categories, including Ungraded)

SHOW SCHOOLS

¹⁰ If an individual school is hosting the EDSCLS, the school name, NCES school ID, and school grade level will be prefilled; additional schools cannot be added.

- b. Because the EDSCLS contains a database of all public schools in the United States based on the Common Core of Data (CCD) (<http://nces.ed.gov/ccd/>), the school name, NCES School ID, and school level will be automatically prefilled for every school displayed.

To edit the school name at the state or district level, enter another name in the “SCHOOL NAME” text box.¹¹

To change the school level (e.g., middle school, high school), select another school level from the “SCHOOL LEVEL” drop-down box that appears to the right of the school name and NCES school ID.

4. To change the school level (e.g., middle school, high school), select another school level from the “SCHOOL LEVEL” drop-down box that appears to the right of the school name and NCES school ID.
5. To navigate between the pages of schools, click on the “Previous” or “Next” links.

SCHOOL NAME	NCES SCHOOL ID	SCHOOL LEVEL	NUMBER OF RESPONDENTS	
ROUND ROCK H S	483808004254	High	250	✕
SUCCESS H S	483808008958	High	100	✕
WESTWOOD H S	483808005805	High	500	✕
		...		✕

[Find NCES School ID](#)

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Previous Next

6. Determine how many respondents are in each population and enter that number into the “NUMBER OF RESPONDENTS” text box for each school. For example, if 450 students enrolled in a school will be invited to take the survey, 450 usernames should be requested for that school.

NOTE

A number greater than zero must be entered. Schools that do not have at least one respondent will be removed from the database once the usernames are generated.

¹¹ Note that you can use this method to add your school if it is a private institution or newly formed and so does not appear in the NCES Public School Locator. Please see section 2.2.7 B. [To add a school to the data collection](#) for more details for adding a school not included in the CCD. You can modify any school’s information to match yours or add your school at the end of the school list. Then you can either delete other schools or leave their “Number of Respondents” field as “0” to exclude them from the database.

7. Click on the “GENERATE” button to generate usernames.

NOTE

Respondent usernames are 8 characters long and are made up of lowercase letters and numbers. Student usernames begin with the letter “s”; teacher/instructional staff usernames begin with “t”; noninstructional staff usernames begin with “n”; principal usernames begin with “np”; and parent/guardian usernames begin with “p”.

One principal username is generated for each school in the noninstructional staff data collection. Note that principals answer all items in the noninstructional staff survey, but there are several specific items set aside for principals only. **Please do not assign principal usernames to other noninstructional staff.**

It may take up to 10 seconds to generate 500 usernames, and 90 seconds to generate 5,000 usernames.

On the dashboard, the Generated and Exported columns will be marked with check marks once all usernames for the data collection have been generated and exported. By default, usernames are exported into a single CSV file for each data collection.

To add additional usernames, you must *increase* the total number of usernames for that school by the amount of additional usernames required (e.g., if you have 100 usernames for a school and would like to add 25 additional usernames, you would enter 125 in the box next to that school). Reducing the number of usernames (e.g., using the previous example, if you replace 100 with 25) will result in the loss of data. A pop-up message on the “Generate Usernames” page will alert users when the total number of usernames is reduced.

B. To add a school to the data collection (district- and state-level hosts only):

1. Enter the NCES school ID into the “NCES SCHOOL ID” auto-completer text box.

If you do not know the ID, click on the “Find NCES School ID” link to be redirected to the NCES Public School Locator.

If the school does not have an ID, because it is newly formed or a private institution, select a public school from the list, preferably one nearby, and manually modify the school information to reflect the correct information.

NOTE

At the state level, the first 2 digits of the NCES school ID must match the American National Standards Institute (ANSI) Code of the state education agency. At the district level, the first 7 digits of the NCES school ID must match the NCES ID of the district.

SELECT DATA COLLECTION
Data Collection: 12/02/2014-12/19/2014:Students

SCHOOL NAME	NCES SCHOOL ID	SCHOOL LEVEL	NUMBER OF RESPONDENTS	
ROUND ROCK H S	483808004254	High	250	✕
SUCCESS H S	483808008958	High	100	✕
WESTWOOD H S	483808005805	High	500	✕
	4838080	...		✕

Page 1 of 1

[BACK](#) [GE](#)

ANDERSON MILL EL (483808004247)
 BLACKLAND PRAIRIE EL (483808009102)
 BLUEBONNET EL (483808006315)
 BRUSHY CREEK EL (483808005802)
 C D FULKES MIDDLE (483808004255)
 CACTUS RANCH EL (483808009103)
 CALDWELL HEIGHTS EL (483808008413)
 CANYON CREEK EL (483808008087)

2. Select a school from the “NCES SCHOOL ID” auto-completer list or enter another NCES school ID.

If a school was selected from the “NCES SCHOOL ID” auto-completer list, the school name and school level will be prefilled. Otherwise, the school name will be blank and the school level will be unselected.

NOTE

The prefilled school level is calculated from the school’s corresponding low and high grade span values in the NCES Common Core of Data (CCD): primary (low grade = PK–03; high grade = PK–08); middle (low grade = 04–07; high grade = 04–09); high (low grade = 07–12; high grade = 12 only); other (any other configuration not falling within the above three categories, including ungraded).

3. To edit or specify the school name, enter the name in the “SCHOOL NAME” text box.
4. To change or specify the school grade level, select a level from the “SCHOOL LEVEL” drop-down box.
5. Click on the *Save* icon.

C. To delete a school (district- and state-level hosts only):

1. Click on the *Delete* icon of the school to be deleted.

SCHOOL NAME	NCES SCHOOL ID	SCHOOL LEVEL	NUMBER OF RESPONDENTS	
ROUND ROCK H S	483808004254	High	250	✕
SUCCESS H S	483808008958	High	100	✕
WESTWOOD H S	483808005805	High	500	✕
		...		✕

[Find NCES School ID](#)

Username can be exported in CSV file format. This file type can be opened with text editors (e.g., NotePad, WordPad, or TextEdit), Excel, and many programming applications. Once the usernames are in CSV file format, the Survey Administrator can hand them off to Survey Coordinators in each school,¹² or the administrator can take the steps needed to e-mail survey invitations through the platform, as described below.

D. To export usernames (file will be in CSV format):

1. Under the Respondent Usernames section, click on the “Export” menu button.

RESPONDENT USERNAMES
Generate, export, and disseminate respondent usernames for data collections that have not closed yet. Exporting usernames, importing respondent e-mail addresses, and disseminating usernames via e-mail are optional features.

DATA COLLECTION	STATUS	GENERATED	EXPORTED	DISSEMINATED
12/02/2014-12/19/2014:Students	Started	✓	✓	✗

Generate Export Disseminate >

Alternatively, click on the “EXPORT” link from the toolbar on any Respondent Usernames page.

ED SCHOOL CLIMATE SURVEYS
EDSCLS ADMIN HOME GENERATE EXPORT DISSEMINATE LOG OUT

2. Select the data collection from the “Data Collection” drop-down box.
3. To generate multiple export files by school at the state or district level, check the “Multiple Files” check box.

Data Collection: 12/02/2014-12/19/2014:Students ▼
☒ Multiple Files
EXPORT

4. Click on the “EXPORT” button.

¹² If an education agency does not have the e-mail addresses of a respondent group, it will need to use other means of getting each invitee a unique username. For example, follow the instructions to export the usernames in [2.2.7 Respondent Usernames Generation](#); then print out the usernames and distribute them on paper. Also consider the guidance offered in [3.1 Preparing for the Survey Administration](#).

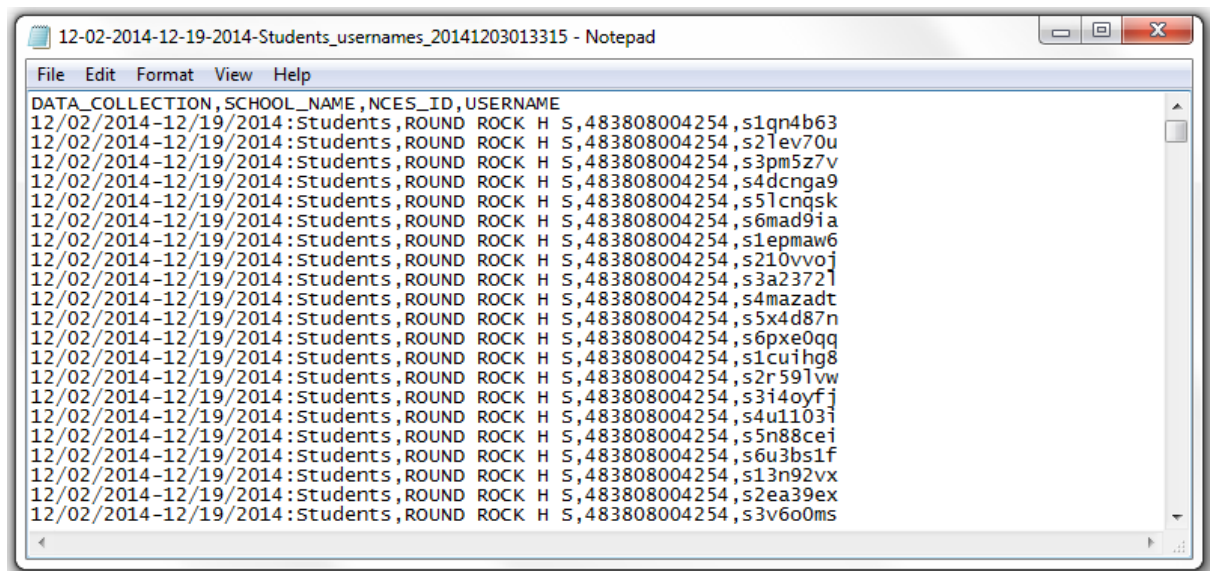
2.2.8 Respondent Usernames Dissemination

The following instructions explain how to disseminate usernames through the EDSCLS e-mail function. Please note that if your IT staff is not able to set up the e-mail service for the EDSCLS platform, you will not be able to use this feature. You will need to either disseminate usernames using your regular e-mail system or disseminate them manually, by printing them out on paper.

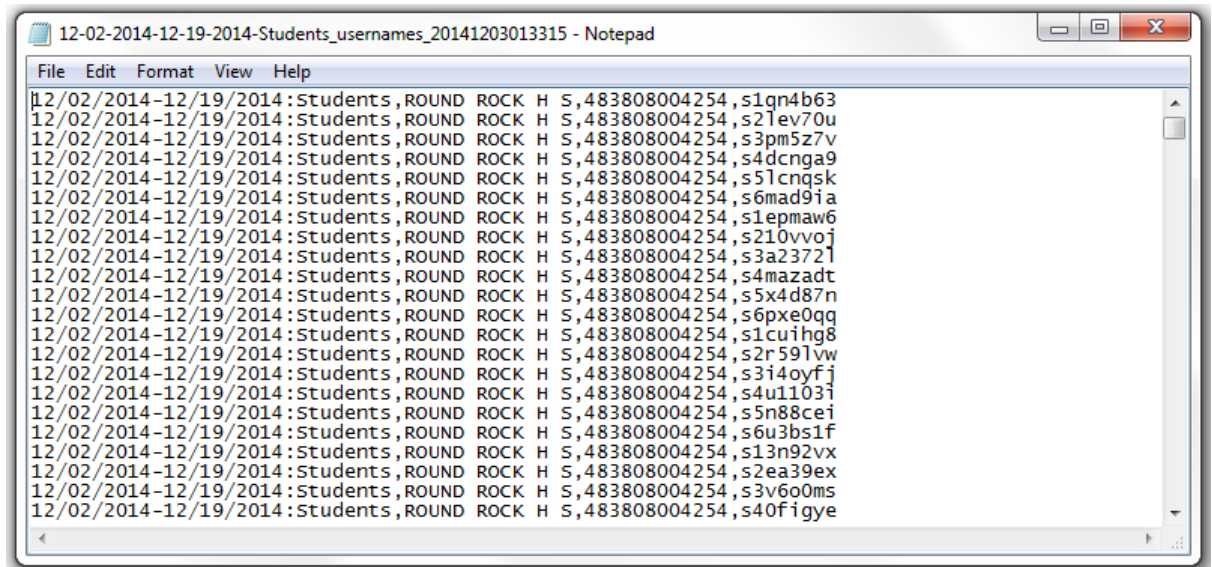
E-mail addresses and usernames can be merged using either a text editor or Excel.

A. To merge e-mail addresses with usernames using a text editor:

1. Open the exported usernames CSV file in a text editor like Notepad, WordPad, or TextEdit.



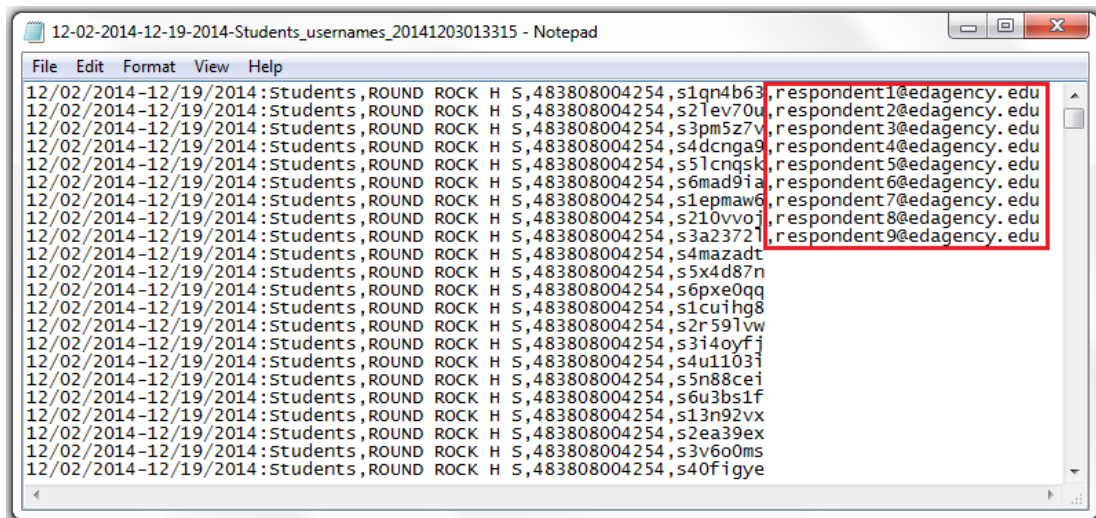
2. Delete the first row, which contains the column headers (i.e., DATA_COLLECTION, SCHOOL_NAME, etc.).



12-02-2014-12-19-2014-Students_usernames_20141203013315 - Notepad

```
File Edit Format View Help
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s1qn4b63
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s21ev70u
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s3pm5z7v
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s4dcnga9
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s51cnqsk
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s6mad9ia
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s1epmaw6
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s210vvoj
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s3a23721
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s4mazadt
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s5x4d87n
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s6pxe0qq
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s1cuihg8
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s2r591vw
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s314oyfj
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s4u1103f
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s5n88cei
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s6u3bs1f
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s13n92vx
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s2ea39ex
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s3v6o0ms
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s40figye
```

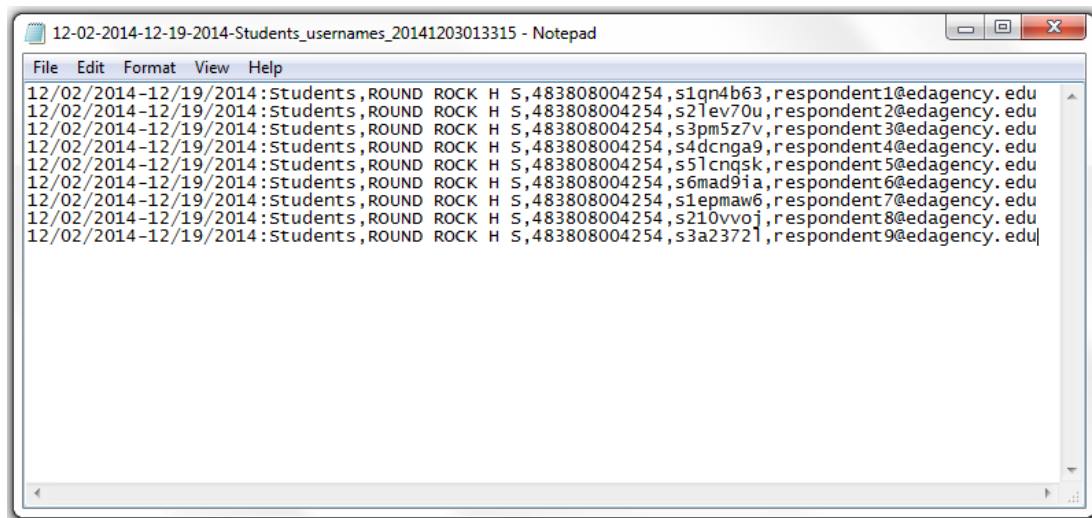
3. After each username, enter “,” and the e-mail address.



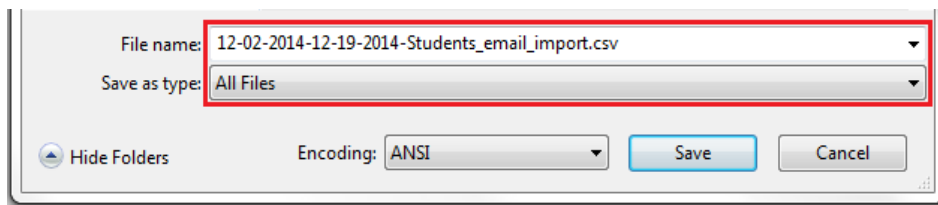
12-02-2014-12-19-2014-Students_usernames_20141203013315 - Notepad

```
File Edit Format View Help
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s1qn4b63,respondent1@edagency.edu
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s21ev70u,respondent2@edagency.edu
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s3pm5z7v,respondent3@edagency.edu
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s4dcnga9,respondent4@edagency.edu
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s51cnqsk,respondent5@edagency.edu
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s6mad9ia,respondent6@edagency.edu
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s1epmaw6,respondent7@edagency.edu
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s210vvoj,respondent8@edagency.edu
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s3a23721,respondent9@edagency.edu
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s4mazadt
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s5x4d87n
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s6pxe0qq
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s1cuihg8
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s2r591vw
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s314oyfj
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s4u1103f
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s5n88cei
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s6u3bs1f
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s13n92vx
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s2ea39ex
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s3v6o0ms
12/02/2014-12/19/2014:Students,ROUND ROCK H S,483808004254,s40figye
```

4. Delete any rows that do not have an e-mail assigned to a username.



5. When saving the file, enter a file name, followed by “.csv”, and select “All Files” from the “Save as type” drop-down box.



6. Click on the “Save” button.

B. To merge e-mail addresses with usernames using Excel:

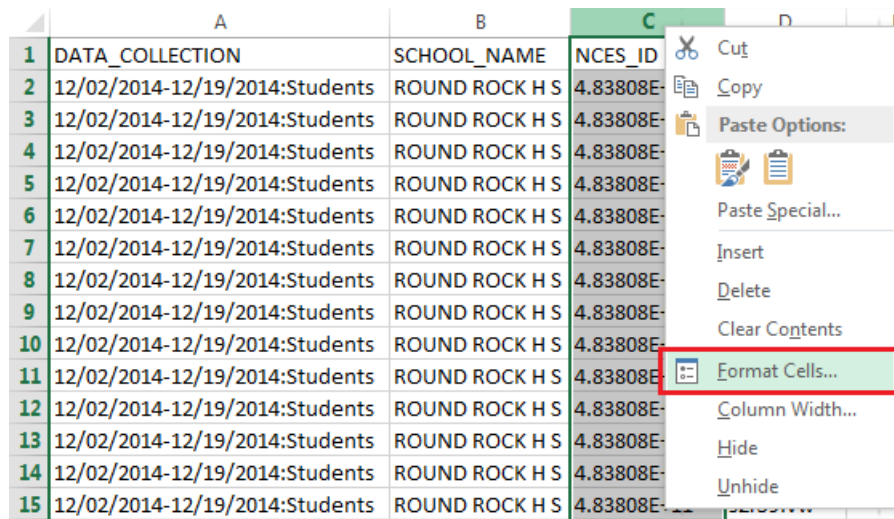
1. Open the exported usernames CSV file in a Microsoft Excel document.

	A	B	C	D
1	DATA_COLLECTION	SCHOOL_NAME	NCES_ID	USERNAME
2	12/02/2014-12/19/2014:Students	ROUND ROCK H S	4.83808E+11	s1qn4b63
3	12/02/2014-12/19/2014:Students	ROUND ROCK H S	4.83808E+11	s2lev70u
4	12/02/2014-12/19/2014:Students	ROUND ROCK H S	4.83808E+11	s3pm5z7v
5	12/02/2014-12/19/2014:Students	ROUND ROCK H S	4.83808E+11	s4dcnga9
6	12/02/2014-12/19/2014:Students	ROUND ROCK H S	4.83808E+11	s5lcnqsk
7	12/02/2014-12/19/2014:Students	ROUND ROCK H S	4.83808E+11	s6mad9ia
8	12/02/2014-12/19/2014:Students	ROUND ROCK H S	4.83808E+11	s1epmaw6
9	12/02/2014-12/19/2014:Students	ROUND ROCK H S	4.83808E+11	s210vvoj
10	12/02/2014-12/19/2014:Students	ROUND ROCK H S	4.83808E+11	s3a2372l

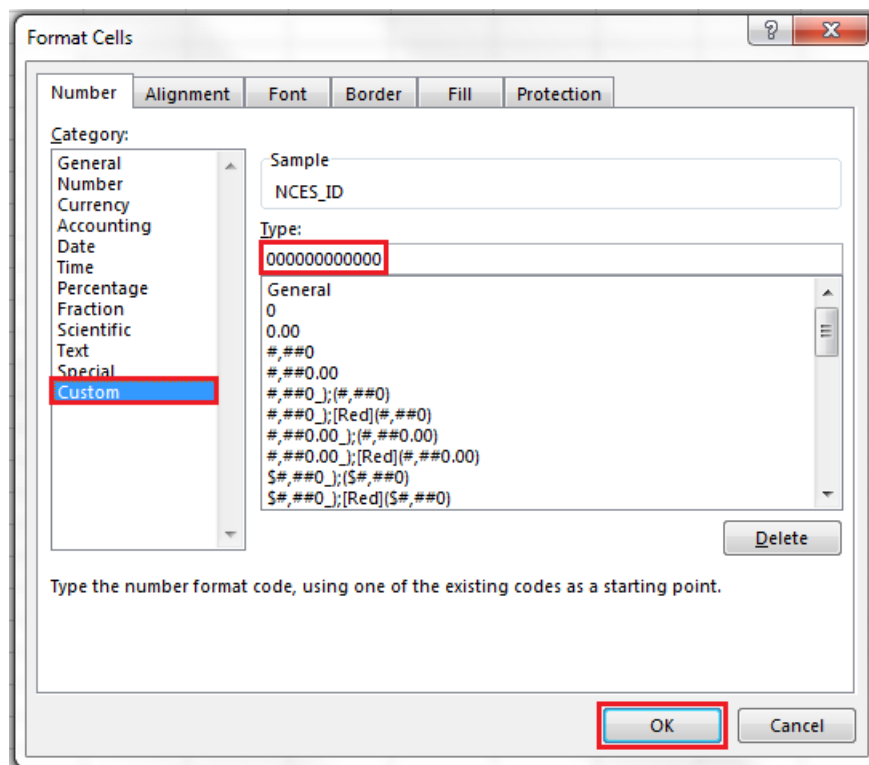
NOTE

The NCES ID will be shown in scientific notation in Excel by default. The administrator will have to complete step 2 below in order to change it back to its original form. The file cannot be imported back into the EDSCLS platform in usable form without completing this step.

2. To convert the NCES ID to a text column, select column C (NCES_ID), right-click, and select “Format Cells...”.



3. From the “Format Cells” window, select “Custom” for the “Category” and type 12 zeroes (i.e., “000000000000”) directly into the “Type” text box. Then click the on “OK” button.



4. Delete the first row, which contains the column headers (i.e., DATA_COLLECTION, SCHOOL_NAME, etc.). The end result should be raw data, like the sample seen below.

	A	B	C	D
1	12/02/2014-12/19/2014:Students	ROUND ROCK H S	483808004254	s1qn4b63
2	12/02/2014-12/19/2014:Students	ROUND ROCK H S	483808004254	s2lev70u
3	12/02/2014-12/19/2014:Students	ROUND ROCK H S	483808004254	s3pm5z7v
4	12/02/2014-12/19/2014:Students	ROUND ROCK H S	483808004254	s4dcnga9
5	12/02/2014-12/19/2014:Students	ROUND ROCK H S	483808004254	s5lcnqsk
6	12/02/2014-12/19/2014:Students	ROUND ROCK H S	483808004254	s6mad9ia
7	12/02/2014-12/19/2014:Students	ROUND ROCK H S	483808004254	s1epmaw6
8	12/02/2014-12/19/2014:Students	ROUND ROCK H S	483808004254	s210vvoj
9	12/02/2014-12/19/2014:Students	ROUND ROCK H S	483808004254	s3a2372l
10	12/02/2014-12/19/2014:Students	ROUND ROCK H S	483808004254	s4mazadt

5. Enter the e-mail addresses in column E.

	A	B	C	D	E
1	12/02/2014-12/19/2014:Students	ROUND ROCK H S	483808004254	s1qn4b63	respondent1@edagency.edu
2	12/02/2014-12/19/2014:Students	ROUND ROCK H S	483808004254	s2lev70u	respondent2@edagency.edu
3	12/02/2014-12/19/2014:Students	ROUND ROCK H S	483808004254	s3pm5z7v	respondent3@edagency.edu
4	12/02/2014-12/19/2014:Students	ROUND ROCK H S	483808004254	s4dcnga9	respondent4@edagency.edu
5	12/02/2014-12/19/2014:Students	ROUND ROCK H S	483808004254	s5lcnqsk	respondent5@edagency.edu
6	12/02/2014-12/19/2014:Students	ROUND ROCK H S	483808004254	s6mad9ia	respondent6@edagency.edu
7	12/02/2014-12/19/2014:Students	ROUND ROCK H S	483808004254	s1epmaw6	respondent7@edagency.edu
8	12/02/2014-12/19/2014:Students	ROUND ROCK H S	483808004254	s210vvoj	respondent8@edagency.edu
9	12/02/2014-12/19/2014:Students	ROUND ROCK H S	483808004254	s3a2372l	respondent9@edagency.edu
10	12/02/2014-12/19/2014:Students	ROUND ROCK H S	483808004254	s4mazadt	
11	12/02/2014-12/19/2014:Students	ROUND ROCK H S	483808004254	s5x4d87n	
12	12/02/2014-12/19/2014:Students	ROUND ROCK H S	483808004254	s6pxe0qq	
13	12/02/2014-12/19/2014:Students	ROUND ROCK H S	483808004254	s1cuihg8	
14	12/02/2014-12/19/2014:Students	ROUND ROCK H S	483808004254	s2r59lvw	
15	12/02/2014-12/19/2014:Students	ROUND ROCK H S	483808004254	s3i4oyfj	

NOTE

District- and state-level Survey Administrators may need to establish their own logistics chains to acquire respondents' e-mail lists from school and/or districts, depending on where such data are stored. Consider the logistics chain recommended in [3.1 Preparing for the Survey Administration](#).

6. Delete any rows that do not have an e-mail assigned to a username.

	A	B	C	D	E
1	12/02/2014-12/19/2014:Students	ROUND ROCK H S	483808004254	s1qn4b63	respondent1@edagency.edu
2	12/02/2014-12/19/2014:Students	ROUND ROCK H S	483808004254	s2lev70u	respondent2@edagency.edu
3	12/02/2014-12/19/2014:Students	ROUND ROCK H S	483808004254	s3pm5z7v	respondent3@edagency.edu
4	12/02/2014-12/19/2014:Students	ROUND ROCK H S	483808004254	s4dcnga9	respondent4@edagency.edu
5	12/02/2014-12/19/2014:Students	ROUND ROCK H S	483808004254	s5lcnqsk	respondent5@edagency.edu
6	12/02/2014-12/19/2014:Students	ROUND ROCK H S	483808004254	s6mad9ia	respondent6@edagency.edu
7	12/02/2014-12/19/2014:Students	ROUND ROCK H S	483808004254	s1epmaw6	respondent7@edagency.edu
8	12/02/2014-12/19/2014:Students	ROUND ROCK H S	483808004254	s210vvoj	respondent8@edagency.edu
9	12/02/2014-12/19/2014:Students	ROUND ROCK H S	483808004254	s3a2372l	respondent9@edagency.edu
10					
11					
12					
13					
14					
15					

7. When saving the file, enter a file name and select “CSV (Comma delimited)” from the “Save as type” drop-down box in order to import back into the EDSCLS platform.

File name:

12-02-2014-12-19-2014-Students_email_import

Save as type:

CSV (Comma delimited)

8. Click on the “Save” button.

C. To import the merged usernames-with-e-mails CSV file:

1. Under the Respondent Usernames section, click on the “Import E-mails” option from the “Disseminate” menu.

RESPONDENT USERNAMES

Generate, export, and disseminate respondent usernames for data collections that have not closed yet. Exporting usernames, importing respondent e-mail addresses, and disseminating usernames via e-mail are optional features.

DATA COLLECTION	STATUS	GENERATED	EXPORTED	DISSEMINATED
12/02/2014-12/19/2014:Students	Started	✓	✓	✗

Generate

Export

Disseminate

Import E-mails

E-mail Usernames

Alternatively, click on the “IMPORT E-MAILS” link under the “DISSEMINATE” menu from the toolbar on any Respondent Usernames page.

ED SCHOOL CLIMATE SURVEYS

ADMIN HOME

GENERATE

EXPORT

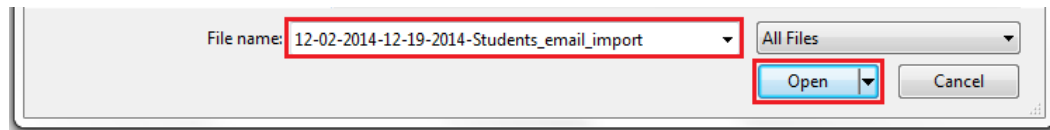
DISSEMINATE

LOG OUT

IMPORT E-MAILS

E-MAIL USERNAMES

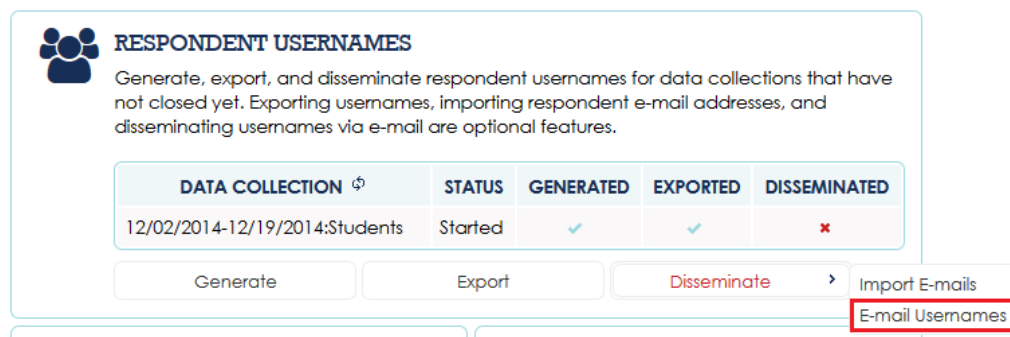
2. Select the data collection from the “Data Collection” drop-down box.
3. Click on the “Browse...” button to open the File Upload window.
4. From the File Upload window, select the e-mail CSV file to import and click on the “Open” button.



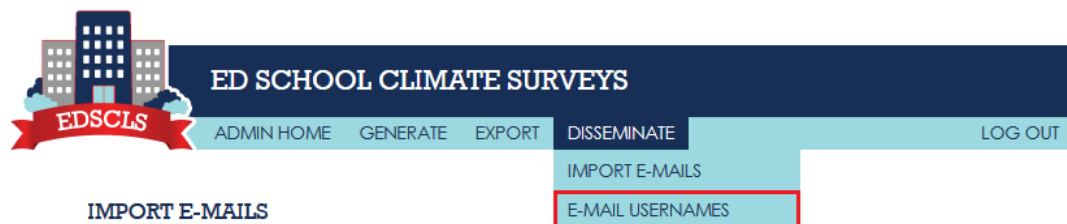
5. Click on the “IMPORT FILE” button.

D. To disseminate the usernames via the e-mail tool in the EDSCLS:

1. Under the Respondent Usernames section, click on the “E-mail Usernames” option from the “Disseminate” menu.



Alternatively, click on the “E-MAIL USERNAMES” link under the “DISSEMINATE” menu from the toolbar on any Respondent Usernames page.



2. Select the data collection from the “Data Collection” drop-down box.
3. The “Send to new recipients only” check box is checked by default. Uncheck to send follow-up or reminder e-mails to recipients who have previously received e-mails.
4. Enter the e-mail subject in the “Subject” text box.
5. Modify the e-mail message in the “Message” text area, including replacing “{Please insert the link to your survey}”.

6. Click on the “SEND” button.


NOTE

On the dashboard, the “Disseminated” column will be marked with a check mark once all usernames for the data collection have been disseminated via the e-mail tool in the EDSCLS platform. Please note that the platform does not know if the e-mails have been successfully delivered. Survey Administrators will need to coordinate with their IT staff to track any e-mails that may be returned as undeliverable.

Administrators will need to refresh the Data Collection table to check the latest status of the usernames.


E. To refresh the data collection table after usernames have been generated, exported, and/or disseminated:

1. Click on the *Refresh* icon.



RESPONDENT USERNAMES

Generate, export, and disseminate respondent usernames for data collections that have not closed yet. Exporting usernames, importing respondent e-mail addresses, and disseminating usernames via e-mail are optional features.

DATA COLLECTION 	STATUS	GENERATED	EXPORTED	DISSEMINATED
12/02/2014-12/19/2014:Students	Started	✓	✓	✓
12/05/2014-12/19/2014:Teachers /Instructional Staff	Started	✓	✓	✗

GenerateExportDisseminate >

2.2.9 Reports

On the bottom left of the dashboard home page, you will see a section of the dashboard titled “REPORTS”. This is where Survey Administrators can produce real-time survey status reports during a data collection and survey results reports immediately after the close of data collection.



REPORTS

Produce real-time survey status reports and survey results reports immediately after each data collection.

Survey Status Reports >Survey Results Reports >

2.2.9.1 Survey Status Reports

Once a data collection has started, two types of real-time survey status reports can be viewed and exported:

- (1) Submission Rate Reports
- (2) Case Disposition Reports

Submission Rate Reports:

Survey submission rate reports show the number of usernames generated, the number of incomplete surveys, the number of unused usernames, and the overall submission rate. Survey Administrators can use these reports to monitor data collections and make informed decisions about needed follow-up efforts. Refer to [3.5 During the Survey Administration Window](#) to learn how survey submission rate reports can be used to provide continued communication during administration and optimize response rates.

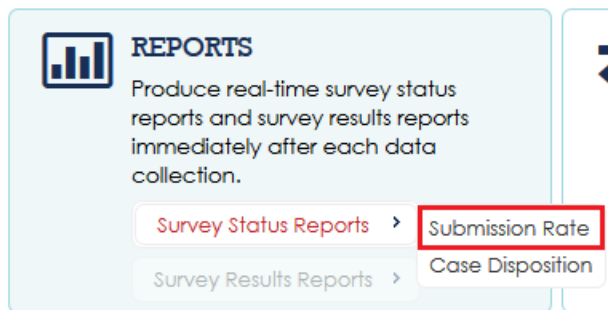
Case Disposition Reports:

It may be useful for Survey Administrators to have access to more granular information about individual case dispositions in order to supplement the information displayed in submission status reports. For example, if an education agency chooses to keep track of which usernames were given to which students, detailed information on the status of individual usernames (e.g., complete, partial, and unused) can help to target the agency's nonresponse follow-up efforts.

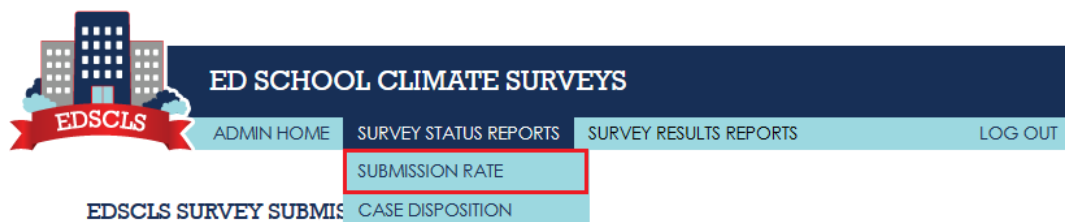
Case disposition reports can be generated in one of three ways: (1) directly through the submission status report tables, (2) through the reporting section on the main page of the Survey Administrator dashboard, or (3) through the "survey status reports" button on the toolbar of any Reports page.

A. To view the submission rate report:




1. Under the Reports section of the dashboard, click on the "Submission Rate" option from the "Survey Status Reports" menu.






Alternatively, click on the "SUBMISSION RATE" option under the "SURVEY STATUS REPORTS" menu from the toolbar on any Reports page.



2. To show submission status information for all data collections at the state or district level, click on the *Expand* icon on the header row.

	DATA COLLECTION	TOTAL USERNAMES GENERATED	NUMBER OF SUBMITTED SURVEYS	NUMBER OF INCOMPLETE SURVEYS	NUMBER OF UNUSED USERNAMES	SURVEY SUBMISSION RATE
	12/02/2014-12/19/2014: Students	850	8	18	824	0.94%
	12/05/2014-12/19/2014: Teachers/Instructional Staff	80	0	0	80	0.00%

3. To show data for a single data collection at the state or district level, click on the *Expand* icon for that data collection.

	DATA COLLECTION	TOTAL USERNAMES GENERATED	NUMBER OF SUBMITTED SURVEYS	NUMBER OF INCOMPLETE SURVEYS	NUMBER OF UNUSED USERNAMES	SURVEY SUBMISSION RATE
	12/02/2014-12/19/2014: Students	850	8	18	824	0.94%
	12/05/2014-12/19/2014: Teachers/Instructional Staff	80	0	0	80	0.00%

NOTE

The definition of each column header in the Submission Rate Report is as follows:

Total Usernames Generated: For each survey being administered (i.e., student, parent, instructional staff, and noninstructional staff [including principals]), the number of usernames that have been generated will be shown. Depending on the level of the education agency that is hosting the surveys (school, district, or state), the total number of usernames will be displayed at the school, district, or state level.

Number of Submitted Surveys: Cases that are assigned a disposition status of “submitted” include those where a respondent has logged in to the survey, consented to participate, and responded to all survey items, thereby completing the survey. Submitted surveys also include finalized cases that do not meet the EDSCLS definition of a completed interview, including those where a respondent has declined to participate at the consent page and those where a respondent viewed all survey items and proceeded to the “thank you” screen without providing valid responses to a sufficient number of items to be classified as a completed interview. This number will provide Survey Administrators with a count of the number of respondents who have finalized their survey.

The sum of the total number of unused usernames; the total number of log-ins, not yet submitted; and the total number of submitted surveys will equal the total number of usernames generated.

Number of Incomplete Surveys: Once a username is used to log in to a survey, the case will be assigned a disposition status of “logged in, not submitted.” This status will include cases typically considered “partial completes.” Cases assigned this status may include those where respondents have logged in to the survey but not yet consented to participate, where respondents have consented to participate but not yet responded to any survey items, and where respondents have responded to survey items, but have not yet viewed the final “thank you” screen. This number will provide Survey Administrators with a count of the number of respondents who have started, but not yet finalized the survey.

Number of Unused Usernames: Usernames that have been generated but not used to access the survey will be displayed in the survey status report. This will provide administrators with an estimate of the number of respondents who have not yet attempted to take the survey. This number will be inflated if the number of usernames generated exceeds the number of potential respondents to the survey (i.e., if “extra” usernames are generated).



Survey Submission Rate: To provide Survey Administrators with an estimate of the percentage of respondents who have finalized the survey, the survey status report will also compute and display a survey submission rate.¹³ The survey submission rate is calculated as

$$100 * (S / C),$$



where S = the total number of survey submissions and C = the total number of usernames generated for the survey.

¹³ Submission rates will not be calculated by respondent demographic subgroups, as survey log-in and submission status will not be linked to survey data containing demographic information.

- To hide detailed data for a single data collection at the state or district level, click on the *Collapse* icon on the header row.

	DATA COLLECTION	TOTAL USERNAMES GENERATED	NUMBER OF SUBMITTED SURVEYS	NUMBER OF INCOMPLETE SURVEYS	NUMBER OF UNUSED USERNAMES	SURVEY SUBMISSION RATE
	12/02/2014-12/19/2014: Students	850	8	18	824	0.94%
	ROUND ROCK H S	250	5	6	239	2.00%
	SUCCESS H S	100	0	2	98	0.00%
	WESTWOOD H S	500	3	10	487	0.60%
	12/05/2014-12/19/2014: Teachers/Instructional Staff	80	0	0	80	0.00%
	ROUND ROCK H S	30	0	0	30	0.00%
	SUCCESS H S	15	0	0	15	0.00%
	WESTWOOD H S	35	0	0	35	0.00%

- To export the case disposition details, click on a link on the submission rate table; then click on the “EXCEL,” “CSV,” or “PDF” menu option.

	DATA COLLECTION	TOTAL USERNAMES GENERATED	NUMBER OF SUBMITTED SURVEYS	NUMBER OF INCOMPLETE SURVEYS	NUMBER OF UNUSED USERNAMES	SURVEY SUBMISSION RATE
	12/02/2014-12/19/2014: Students	850	8	18	824	0.94%
	ROUND ROCK H S	250	5	6	239	2.00%
	SUCCESS H S	100	0	2	98	0.00%
	WESTWOOD H S	500	3	10	487	0.60%
	12/05/2014-12/19/2014: Teachers/Instructional Staff	80	0	0	80	0.00%
	ROUND ROCK H S	30	0	0	30	0.00%
	SUCCESS H S	15	0	0	15	0.00%
	WESTWOOD H S	35	0	0	35	0.00%

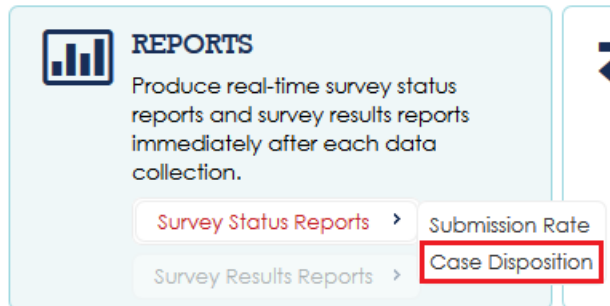
NOTE

Whenever the EXCEL, CSV, or PDF file format option is offered, choose based on what you intend to do with the file. The PDF format is ideal for printing out. The EXCEL format can be used to create your own graphics, such as pie charts or graphs (as recommended in [3.5 During the Survey Administration Window](#)), to share with respondents and increase participation rates. The CSV format is offered because it works in many programming applications, allowing Survey Administrators to conduct their own analyses beyond those offered in the EDSCLS.

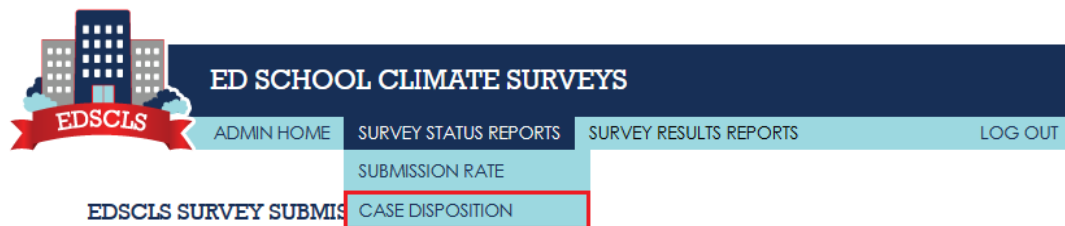
6. To refresh the report to show the very latest real-time data, click on the *Refresh* icon.

B. To view and export the case disposition status report:

1. Under the Reports section of the Survey Administrator dashboard, click on the “Case Disposition” option from the “Survey Status Reports” menu.



Alternatively, click on the “CASE DISPOSITION” option under the “SURVEY STATUS REPORTS” menu from the toolbar on any Reports page.

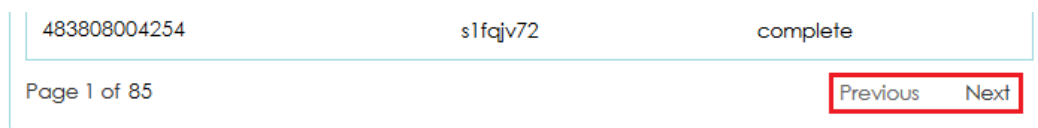


2. Click on the data collection from the “Data Collection” drop-down box.
3. To filter by case disposition status, select a status from the “Status” drop-down box.

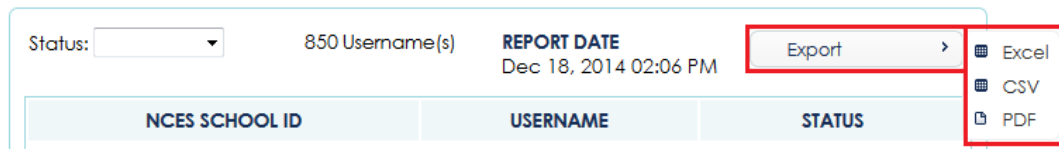
NOTE

The status can be “Unused,” “Partial,” or “Complete.” “Unused” usernames have never been used to log in to the system. “Partial” usernames have been used to log in and begin the survey, but have not been used to complete and submit the survey. “Complete” usernames have been used to complete and submit the survey. Refusals are included in the “Complete” usernames.

4. To navigate between the pages of cases, click on the “Previous” or “Next” links.



- To export the report, click on the “Excel”, “CSV”, or “PDF” option from the “Export” menu.



2.2.9.2 Survey Results Reports

Once a data collection has closed, survey results reports, including graphical displays (bar graphs) of item-level frequencies and scale scores, can be viewed. The current version of the EDSCLS does not allow graphical displays to be exported, so administrators who want visual representations of the results will need to rely on screen captures or create their own graphical displays from the exported raw data (see [2.2.10 Respondent-Level Survey Results](#) for instructions on how to export raw data).

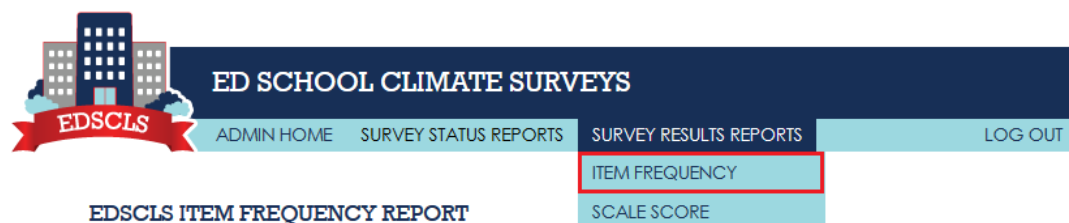
Univariate and cross-tabulation distributions for demographic variables, such as grade (students only), gender, and race/ethnicity, are available for the student, instructional staff, and noninstructional staff data collections. Cross-tabulation distributions cannot be exported.

A. To view and export the item frequency report:

- Under the Reports section, click on the “Item Frequency” option from the “Survey Results Reports” menu.



Alternatively, click on the “ITEM FREQUENCY” option under the “SURVEY RESULTS REPORTS” menu from the toolbar on any Reports page.



NOTE

Item frequencies refer to the distribution of responses for each item.

- States hosting the EDSCLS surveys will have the option of filtering by district or school levels. Districts hosting the EDSCLS will have the option of filtering by the school level. To filter by district (or school), select the district (or school) from the drop-down box.

NOTE

If you want to generate a report for all districts or all schools, make sure the “...” option is selected in the drop down menu where you select the district or the school.

- Click on the “GENERATE REPORT” button.
- To show item frequencies and graphical displays for a topical area within a domain, click on the *Expand* icon.

Engagement

Cultural and Linguistic Competence

Relationships

Participation


Safety

Environment

To show graphical data for all survey items within a topical area, click on the *Expand* icon in the header row.

Engagement						
Cultural and Linguistic Competence						
	SURVEY ITEM	PERCENT				MEAN
		STRONGLY AGREE (4)	AGREE (3)	DISAGREE (2)	STRONGLY DISAGREE (1)	
	All students are treated the same, regardless of whether their parents are rich or poor.	33.33	25	21.67	20	2.72

To show the graphical display for a single survey item within a topical area, click on the *Expand* icon for the survey item.


Engagement						
Cultural and Linguistic Competence						
		PERCENT				
+	SURVEY ITEM	STRONGLY AGREE (4)	AGREE (3)	DISAGREE (2)	STRONGLY DISAGREE (1)	MEAN
	All students are treated the same, regardless of whether their parents are rich or poor.	33.33	25	21.67	20	2.72

NOTE

To protect the confidentiality of respondents, and to provide meaningful data, frequency distributions will not be shown for an item with fewer than 10 respondents. Instead, “Item not shown due to disclosure risk” is displayed.

Engagement						
Cultural and Linguistic Competence						
		PERCENT				
+	SURVEY ITEM	STRONGLY AGREE (4)	AGREE (3)	DISAGREE (2)	STRONGLY DISAGREE (1)	MEAN
	All students are treated the same, regardless of whether their parents are rich or poor.	Item not shown due to disclosure risk				

- To hide item frequencies and graphical displays for a topical area, click on the *Collapse* icon.

Engagement						
 Cultural and Linguistic Competence						

To hide frequencies and graphical displays for all survey items within a topical area, click on the collapse icon button on the header row.

Engagement						
Cultural and Linguistic Competence						
	SURVEY ITEM	PERCENT				MEAN
		STRONGLY AGREE (4)	AGREE (3)	DISAGREE (2)	STRONGLY DISAGREE (1)	
	All students are treated the same, regardless of whether their parents are rich or poor.	33.33	25	21.67	20	2.72

To hide the graphical display for a single survey item within a topical area, click on the *Collapse* icon for the survey item.



6. To view data for a domain, click on a domain header.

▼ Engagement

- ⊕ Cultural and Linguistic Competence
- ⊕ Relationships
- ⊕ Participation

▸ Safety

▸ Environment

▸ Demographic

NOTE

The demographic domain, available for the student, instructional staff, and noninstructional staff (including principals) data collections, is not available for the parent data collection.

▼ Engagement

- ⊕ Cultural and Linguistic Competence
- ⊕ Relationships
- ⊕ Participation

▸ Safety

▸ Environment

7. To export the report, click on the “Excel,” “CSV,” or “PDF” option from the “Export” menu.

NOTE

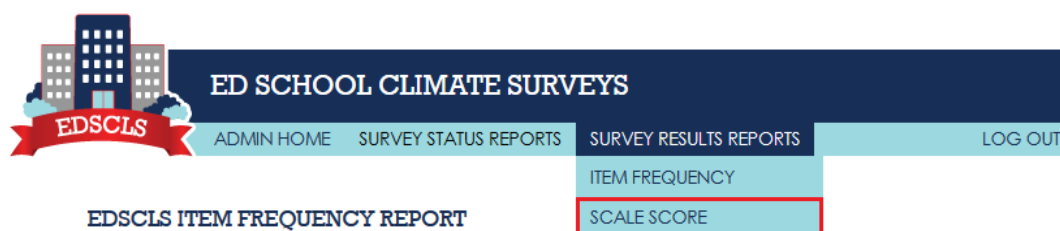
The export feature is available when valid data (i.e., not suppressed because of disclosure risk) have been collected for at least one survey item. The data exported will be in raw format regardless of the file type chosen.

B. To view and export the scale score report¹⁴:

1. Under the Reports section of the Survey Administrator dashboard, click on the “Scale Score” option from the “Survey Results Reports” menu.



Alternatively, click on the “SCALE SCORE” option under the “SURVEY RESULTS REPORTS” menu from the toolbar on any Reports page.



2. Select the data collection from the “Data Collection” drop-down box.
3. Select the domain from the “Domain” drop-down box.

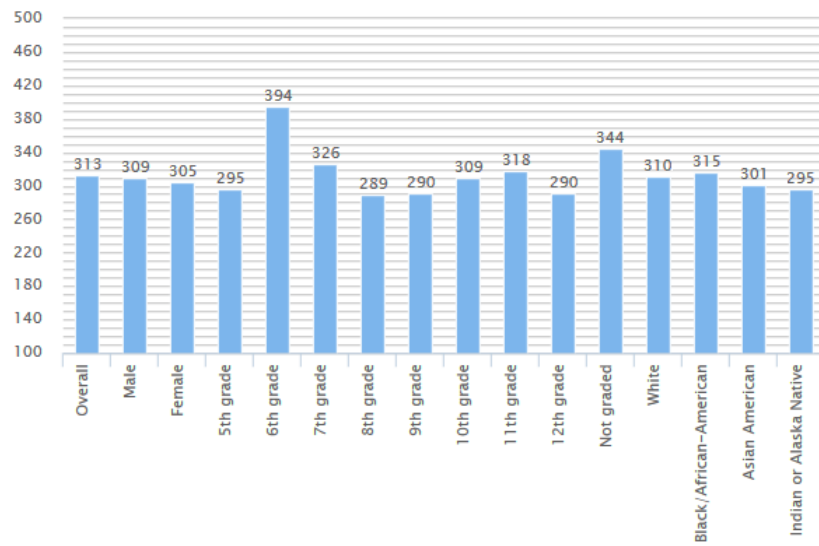
4. To filter by topical area, select the topical area from the “Topical Area” drop-down box.
5. To filter by district at the state level, select the district from the “District” drop-down box.
6. To filter by school at the state or district level, select the school from the “School” drop-down box.
7. Click on the “GENERATE REPORT” button.

¹⁴ Parent surveys do not appear as an option when selecting scale score reports since parent surveys should only be examined at the item level.

8. To show scale scores for a state, district, or school, click on the *Expand* icon.

AVERAGE CULTURAL AND LINGUISTIC COMPETENCE BY GENDER, RACE/ETHNICITY AND GRADE

⊖ AUSTIN ISD

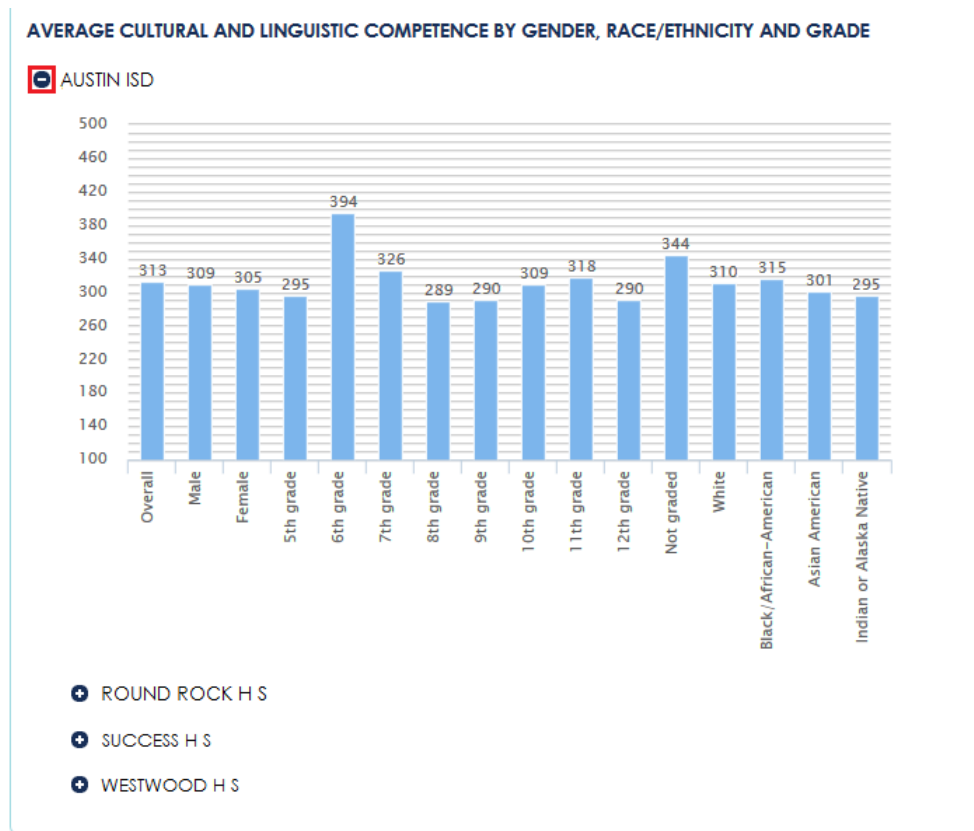


⊕ ROUND ROCK H S

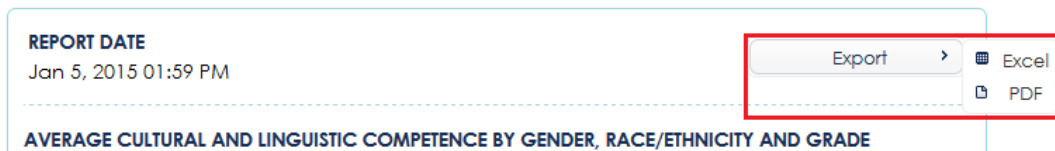
⊕ SUCCESS H S

⊕ WESTWOOD H S

9. To hide scale scores for a state, district, or school, click on the *Collapse* icon.



10. To export the report, click on the “Excel” or “PDF” option from the “Export” menu



2.2.10 Respondent-Level Survey Results

On the bottom right of the dashboard there is a section titled “SURVEY RESULTS.” Respondent-level survey results can be exported and imported to allow schools to provide data to districts and to allow districts to provide data to states. This is also useful for schools, districts, and states that are using multiple copies of the platform. It allows users to combine data into one platform for reporting purposes. The exported data will contain the original system-generated usernames for student respondents—in order to allow student response data to be linked to student records—if the education agency chooses to keep track of which students were given which usernames. Such tracking must occur outside of the EDSCLS platform and is not directly supported by it. The original usernames for parents/guardians, instructional staff, and noninstructional staff (including principals) are replaced with new random usernames to prevent any linkages.

WARNING

Respondent-level data are exported and imported in CSV file format. For many users, the default program for opening CSV files is Microsoft Excel. When you export respondent-level data, open it with Excel and save it, the format of the data in certain columns is altered (e.g., Start Date, End Date, and NCES ID). This alteration will prevent files from being imported correctly into the EDSCLS platform. To avoid errors in importing and exporting data, always open and save exported data files in a text editor like WordPad or NotePad to ensure data remains in the original format.

The underlying database of EDSCLS VM 2.7 has a slightly different structure than the EDSCLS VM 2.6 database because a new survey item was added to the staff surveys. Therefore, raw response data to staff surveys exported from EDSCLS VM 2.6 cannot be imported into EDSCLS VM 2.7.

A. To export survey results to a CSV file:

1. In the Survey Results section, click on the “Export” button.



Alternatively, click on the “EXPORT SURVEY RESULTS” link from the toolbar on any Survey Results page.



2. Select the data collection from the “Data Collection” drop-down box.
3. Check the “I have read and agree to the Pledge of Confidentiality” check box.
4. Click on the “EXPORT” button. Refer to the EDSCLS codebook to view the definitions and valid values for each variable name.

B. To import a survey results CSV file:¹⁵

1. Under the Survey Results section, click on the “Import” button.



Alternatively, click on the “IMPORT SURVEY RESULTS” link from the toolbar on any Survey Results page.



2. Select the data collection from the “Data Collection” drop-down box.
3. Click on the “Browse...” button to open the File Upload window.
4. From the File Upload window, select the survey results CSV file to import and click on the “Open” button. Please note that the CSV file to import has to be in exactly the same format as the survey results CSV file exported from the platform¹⁶.
5. Click on the “IMPORT” button. Please note that certain virtual private network (VPN) or Internet service provider (ISP) may also block large file uploads. In those cases, records need to be imported in smaller batches. Also note that depending on the size of the import file, it may take minutes to hours to process the data for the survey results reports.

3. Administration Guide: Recommended Practices

This section of the guide is intended for EDSCLS Survey Administrators. It provides education agencies with an overview of the best practices they should know about prior to launching an EDSCLS administration. Guidance for specific EDSCLS survey populations—students, instructional staff, noninstructional staff (including principals), and parents/guardians—is indicated where appropriate.

Specifically, the following topics are addressed:

- planning how to survey respondent groups: students, instructional staff, noninstructional staff (including principals), and parents/guardians;
- setting the dates of the administration window;
- dissemination of survey usernames;
- conducting a test run of the EDSCLS before taking it live;

¹⁵ This feature is not available for school-level administrations of the EDSCLS. See WARNING about importing data files from VM 2.6 on 2.2.10 Respondent-Level Survey Results

¹⁶ Please refer to the WARNING message earlier in this section (2.2.10) on the format of CSV files.

- monitoring participation rates and encouraging the participation of potential respondents who have not yet taken the survey; and
- overseeing the data when the administration window closes.

3.1 Preparing for the Survey Administration

This subsection contains recommended practices for preparing for EDSCLS administrations, beginning with specific recommendations for each survey:

Student survey

- The school's own technology capacity plays a large part in considering whether computer labs, media centers, or classrooms (with computer or tablet access) are the best options for administering the survey. If multiple options are available, consider which venue in your school affords the most privacy to each student.
- Regarding parental consent, please use the standard practice of the state/district/school to acquire the proper parental consent for any surveys or testing. The student survey questions are available in paper form in both English and Spanish for parents/guardians to review. It is recommended that parents/guardians be given the opportunity to review the student survey prior to the start of data collection. The student survey questions and parental consent forms can be e-mailed or printed and mailed along with report cards or other school documents. As a reference, two sample parental consent forms (passive and active)¹⁷ are included in [Appendix E](#) of this guide.
 - If your state law or school system policies do NOT require parents/guardians to “opt in” for surveys of their child, you can provide them the *passive* Parental Consent Form I found in E.1.
 - If your state law or school system policies do require parents/guardians to “opt in” for surveys of their child, you will need to provide them the *active* Parental Consent Form II found in E.2.¹⁸

Instructional and noninstructional staff surveys

- If your school does not provide instructional and noninstructional staff access to computers in their classrooms or offices, consider creating a sign-up sheet for the available computers through which staff can rotate.
- Some noninstructional staff, such as custodians, cafeteria workers, and bus drivers, may need to use school computers at designated times to complete their surveys. Schools should provide personnel to assist with this as necessary.
- Staff meetings provide an opportune time to both explain the surveys to staff and to have them complete the survey. Consider setting aside time and/or computers during the meeting for staff to use to complete the survey.
- If staff have designated times in the school day for planning, professional activities, or administrative tasks, consider allowing them to use that time to complete the survey.

Parent/guardian surveys

- In-person explanations may be more effective than letters and e-mails at increasing parent response rates. If a significant number of parents/guardians do not have e-mail addresses or

¹⁷ *Passive* consent means parents must notify the school if they want their child to not take (opt out of) the survey. *Active* consent means parents must notify the school if they want their child to take (opt into) the survey.

¹⁸ Note that acquiring active parental consent requires more advance notice than passive consent, as schools need to note which parents have sent in forms and send reminders, as necessary, to maximize the number of students who will take the survey.

computer access, then letters and in-person explanations become even more important. In such an instance, consider making the EDSCLS a cornerstone of orientation and parent-teacher conferences. Allocate more computers for EDSCLS participation during these meetings, provide personnel to assist, and have plenty of paper versions of the student survey questions on hand for those who request to review them.

- Orientation is ideal for describing the surveys to parents/guardians.
- Consider setting aside a room with computers for parents/guardians to use while they are waiting to start their conference or after they are finished with their conference.

The importance of standardized procedures:

- a. Whether your aim is to compare your school climate results to other schools in your district or state, or to establish your own trend data, applying standardized procedures is critical to producing reliable data. Accurate measurement of the differences between two populations, or the change over time in a single population, cannot be achieved if the measurement process itself is changed in any significant way.
- b. In the context of the EDSCLS, this means maintaining uniform procedures for administering the survey to respondents. For the student survey, this includes the selection and training of Survey Proctors, using the proctor scripts (see [Appendix D](#)), and applying strict protocols to ensure privacy. Training sessions should familiarize Survey Proctors with the scripts, procedures, and use of the FAQs to answer students' questions (see [5. Frequently Asked Questions \(FAQs\)](#)).

Documentation:

- a. It is critical to document decisions made throughout the data collection (e.g., data collection windows, eligibility of respondents, methods used to engage respondents). Whatever procedural decisions are made, the same procedures may need to be followed in subsequent administrations in order to establish valid trend data.

The logistics of administering the EDSCLS:

- a. The EDSCLS platform has been developed to be usable at the school, district, and state levels. Depending on the size and complexity of the population and the education institution, the logistics of administration may require different divisions of labor.
- b. *For state-level administrations*, consider the following configuration of key staff:
 - **State Survey Administrator:** The person leading the EDSCLS administration at the *state* level. This person controls the generation and dissemination of usernames for all respondents, monitors the real-time submission rates of each respondent group, and orchestrates the activities of the District and School Survey Coordinators.
 - **District Survey Coordinator(s):** The people managing the EDSCLS administration at the *district* level. They act as liaisons between the State Survey Administrator and the School Survey Coordinators.
 - **School Survey Coordinators:** The people managing the EDSCLS administration at the *school* level. They answer respondents' questions about the EDSCLS, remind all respondents to answer their surveys, and reserve space during the administration window for students to take the surveys.
 - i. Depending on the size and complexity of the district, either the District Survey Coordinators or the School Survey Coordinators are tasked with recruiting Survey Proctors and with organizing and conducting their training.

- **Survey Proctors:** The people supervising the in-school student surveys. They prepare the rooms and computer access for students, read the Survey Proctor Script to the students, take note of absentees, and provide support to students having trouble accessing the survey.
- c. *For district-level administrations, consider the following configuration of key staff:*
 - **District Survey Administrator:** The person leading the EDSCLS administration at the *district* level. This person controls the generation and dissemination of usernames for all respondents, monitors the real-time response rates of each respondent group, and orchestrates the activities of the School Survey Coordinators.
 - **School Survey Coordinator(s):** The people managing the EDSCLS administration at the *school* level. They answer respondents' questions about the EDSCLS, remind respondents to answer their surveys, and reserve space for students to take surveys during the administration window.
 - i. Depending on the size and complexity of the district, District Survey Coordinators may be necessary. Either the District Survey Coordinators or the School Survey Coordinators are tasked with recruiting proctors and with organizing and conducting their training.
 - **Survey Proctors:** The people supervising the in-school student surveys. They prepare the rooms and computer access for students, read the Survey Proctor Script to the students, take note of absentees, and provide support to students having trouble accessing the survey.
- d. *For school-level administrations, consider the following configuration of key staff:*
 - **School Survey Administrator:** The person leading the EDSCLS administration at the school. This person controls the generation and dissemination of usernames for all respondents and monitors the real-time response rates of each respondent group. This person also answers respondents' questions about the EDSCLS, reminds all respondents to answer their surveys, and reserves space for students to take surveys. This person also recruits Survey Proctors and organizes and conducts the Survey Proctor Training.
 - i. Depending on the size of the school and the workload of the School Survey Administrator, a School Survey Coordinator may be necessary.
 - **Survey Proctors:** The people supervising the in-school student surveys. They prepare the rooms and computer access for students, read the Survey Proctor Script to the students, take note of absentees, and provide support to students having trouble accessing the survey.

Selecting Survey Proctors for the Student Survey:

- a. EDSCLS student survey administrations must be supervised, necessitating Survey Proctors. The Survey Administrator or Survey Coordinator should select the Survey Proctors and furnish them with student usernames (which the Survey Administrator will randomly generate through the EDSCLS platform) and the proctor script. Depending on the size and complexity of your administration, this task can either be accomplished by a school- or district-level Survey Coordinator.
- b. Eligible Survey Proctors may include teachers, student teachers, noninstructional staff, school counselors, school nurses, computer lab technicians, or outside consultants. If instructional staff are used, please consider having them proctor for classes of students that they do not teach. Despite overt privacy procedures, students may not be as open to providing honest responses in the vicinity of their regular class teacher.

Training Survey Proctors:

- a. Training the Survey Proctors is critical to ensuring that the students finish the survey within a single class period. Provide the Survey Proctors with the Survey Proctor Script (see [Appendix D](#)) and the [5. Frequently Asked Questions \(FAQs\)](#), and hold an in-person or virtual meeting prior to the start of the administration window to review the materials and field any questions the proctors may have.
- b. All individuals involved in administering the EDSCLS, including the Survey Proctors, should sign a Confidentiality Pledge (see the sample in [Appendix C](#)). This reinforces the commitment to confidentiality, and the signed form can be shown to parents/guardians to address privacy concerns.

Determining Respondent Eligibility/Ineligibility:

- a. It is recommended that data be collected from all eligible respondents at a school to obtain a full picture of the school climate. This is called a universe or census data collection.
- b. Even with a census or universe data collection, decisions should be made by the education agency regarding respondent eligibility. For example, consider:
 - Students who are new to the school. Students may need time to experience the school building before accurately answering questions about building-level conditions. Consider whether students must be enrolled in the school for a certain number of days prior to being eligible for the survey.
 - Students who are eligible for alternative assessment. The EDSCLS survey is not specifically designed to accommodate students with severe cognitive disabilities who typically require alternative assessments. Consider whether these students should be ineligible.
 - For the instructional staff and noninstructional staff surveys, consider which staff will be invited. Some important questions to consider are as follows: Should only full-time and part-time staff be included, or would you also include occasional staff and substitute teachers? Should noninstructional staff who interact with students in nonacademic ways, such as janitors, bus drivers, and cafeteria staff, be included?

Make sure to document these decisions. Future administrations of the EDSCLS need to replicate these decisions in order to establish valid trend data.

Information on Response Rates:

- a. A response rate is the number of those eligible for the survey who respond divided by the number of those eligible for the survey. Achieving high response rates is very important for obtaining valid and unbiased data. Education agencies should make a decision regarding the acceptable minimal response rate for a respondent group's data to be included when reporting results.

Overcoming the Challenges Around Communicating with Parents/Guardians:

- a. Parents'/guardians' opinions about a school's climate are very important. However, obtaining their interest and support can be challenging. Parents/guardians may not have the technology to access the survey or have enough technical skills to answer the online survey. They may also feel they are too busy to respond to the survey.
- b. Given these challenges, we recommend reaching out to parents/guardians early, informing them about the goals of the survey and providing opportunities to ask questions. Schools may need to employ creative strategies to interest them in the survey. It is important to note that the parent survey is short, and it can be answered on desktops and laptops as well as on any mobile device, such as tablets or smart phones. Those parents/guardians who are not familiar with computers can be invited to use school computers, with assistance provided by school personnel.

3.2 Setting Dates for the Survey Administration Window

Setting the dates of the administration involves early planning. Spring administrations are recommended because they give respondents a chance to reflect and report on their perceptions of the school over the course of the school year. The dates you select for the survey administration window can affect participation rates, the perceptions of certain school climate factors, and future administrations. Consider the following guidelines:

- Establishing trend data
 - If your state or district is interested in comparing school scores across the state or district, your state or district should administer the surveys to all participating schools during the same time frame.
 - If you intend to use the EDSCLS to establish trend data across time, repeated administrations should be conducted cyclically, during the same 2-week to 1-month window, annually or biannually. This prevents conflation of cyclical factors with structural factors.
- School year schedule
 - The EDSCLS is best administered in the spring, but no later than April, if possible. Later administrations face the challenge of competing for time with standardized tests, increasingly busy school schedules, and higher absentee rates (an especially acute problem when surveying 12th-grade students).
 - We recommend that sites avoid conducting the survey at the same time as state testing. Both efforts aim to measure school characteristics that have matured over a school year, but past experience suggests that a significant number of schools do not have the administrative and/or technological capacity to conduct concurrent universal data collections. As such, we recommend that sites carefully examine the calendar of activities for all participating schools and select the optimal time for administration.
 - If it is not possible to schedule concurrent data collections—at multiple schools, to different respondent groups, or to students at multiple grades—consider using slightly different data collection windows for different sites or populations.
- Other considerations
 - **Holidays.** It is best to avoid conducting the EDSCLS after long school breaks, especially after the winter holiday and spring break. In general, surveys should not be conducted on the day immediately before or after a holiday because absentee rates may spike.
 - **Days of the Week.** If possible, avoid administering the student survey on Mondays and Fridays, as they often have unusually low attendance rates. This is particularly prevalent on Fridays before a Monday holiday.
 - **Submission Rates.** If submission rates¹⁹ are low, the Survey Administrator may want to consider extending the data collection window in the EDSCLS platform (see [2.2.4 Data Collection](#)). This is a particularly attractive feature when a large number of respondents have logged in to the survey but not have submitted it or a large number of potential respondents have not been used (see [2.2.7 Respondent Usernames Generation](#)). Those in both groups may be convinced to finish the survey, if reminded and given a little more time. For students, this may mean

¹⁹ The submission rate is the number of surveys completed (i.e., submitted to the EDSCLS system) divided by the number of usernames randomly generated by the system. Submission rates can be different from response rates. For example, a Survey Administrator may generate extra usernames, resulting in a higher denominator for the submission rate calculation. Also, respondents who log in to the survey but choose the opt-out feature will be considered to have completed a survey for the purposes of the submission rate, but are not technically considered respondents. Since the EDSCLS platform cannot produce response rates, submission rates should be used as a proxy for response rates.

scheduling a make-up time to respond to or finish up surveys (this is especially helpful for slow readers).

Closed data collections cannot be reopened. If during a data collection, you decide that the length of the window should be increased, try to implement the change before the original window expires. If the original end date is reached, you can employ a workaround by creating a new data collection and then importing the results of the second data collection into the first one (See [2.2.10 Respondent-Level Survey Results](#)).

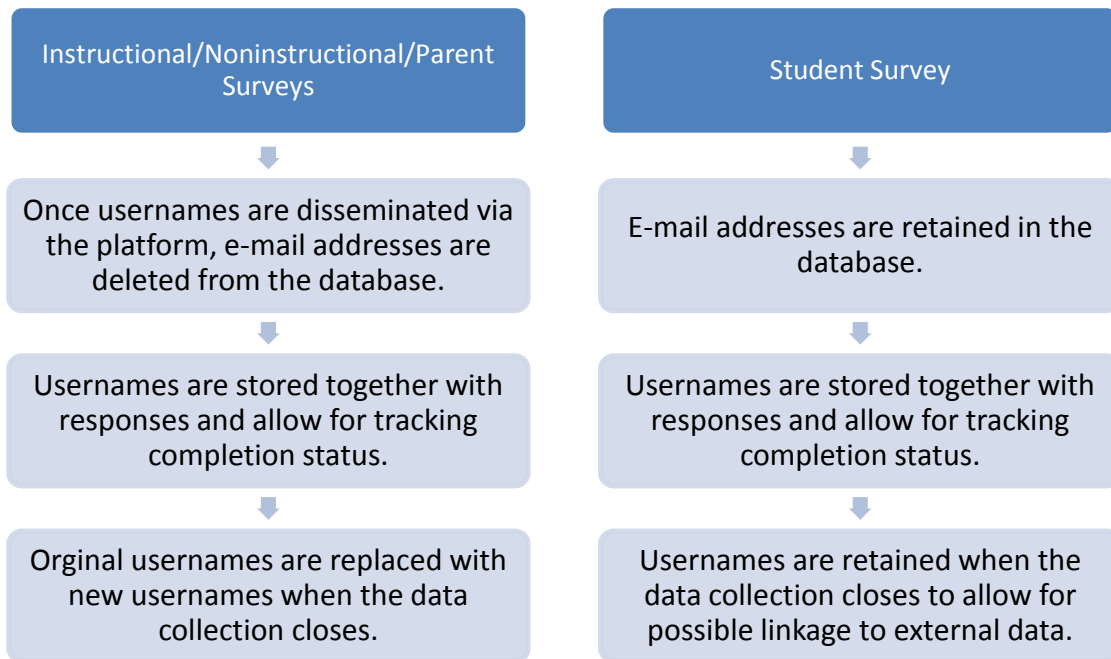
3.3 Dissemination of Survey Usernames

Section 2.2.8 above provides instructions for disseminating usernames through the e-mail function of the EDSCLS platform. This is the most efficient method and is particularly useful for large data collections. However, if your host server is not configured to send out e-mails, your site will need to consider the option of manually distributing the usernames on paper or using regular e-mail services outside of the platform.

Manual distribution should also be considered if your site experiences pushback from respondents concerned about the confidentiality of their responses. This process involves generating the usernames in the standard way, exporting the usernames to a PDF or EXCEL file, and then printing them out instead of e-mailing them. Printed usernames can be distributed anonymously by, for example, having respondents pick one username from a stack of paper strips on which the usernames have been printed. This will ensure that responses cannot be linked back to specific respondents and that the same usernames will not be distributed to multiple persons.

Please note that the instructional, noninstructional (including principal), and parent survey responses cannot be linked back to respondents. Even if usernames are disseminated via the platform, the original usernames are replaced with randomly generated usernames as soon as the data collection closes and the results are made available. Figure 3 shows how usernames are retained or deleted for different respondents.

Figure 3. Username Retention or Deletion in the EDSCLS



3.4 Test Runs Prior to Administration

Survey Administrators should conduct a test run of the platform and logistics chain to make sure that the platform has been installed properly and the system works. Conducting a test run can also help you become familiar with the survey administration process. The test run should include the following steps:

1. Set the Data Collection start and end dates.
2. Generate at least one random username for each respondent group.
3. Use the usernames to log in and answer the first few questions.
4. Use the “REPORTS” boxed section of the dashboard to make sure it is showing your username as “Partial.”
5. Complete the remainder of the survey begun in step 3.
6. Check the *Survey Status Reports/Case Disposition* section to make sure it is showing your username as “Completed.”
7. After the data collection end date, check the *Survey Status Reports* section to make sure it reflects question-level data (i.e., item frequencies, scale scores). Please note that results will only be shown if there are 10 or more responses due to concerns of disclosure risk.

Survey Administrators, Survey Coordinators, and Survey Proctors should do a test run to access and log in to the survey prior to the start of the data collection. For efficiency, consider folding this test run into the training of Survey Coordinators and/or Survey Proctors.

At least three school days before the survey window starts, the Survey Administrator should distribute the following materials related to the student survey to each Survey Proctor (usually through the school-level Survey Coordinators):

- classroom number(s) and period(s) of their administrations;
- class roster (to keep track of absentees);
- student usernames randomly generated by the EDSCLS platform;
- proctor instructions; and
- Survey Proctor Script (see [Appendix D](#)).

3.5 During the Survey Administration Window

Several different kinds of activities and considerations are important when a data collection is open; these include communication with respondents and survey personnel, monitoring submission rates and incentivizing participation, and evaluating potential nonresponse bias.

Guidelines for communication during administration:

- The EDSCLS platform reports the number of the usernames generated for each data collection, and the number used to log in as well as the submission rate (see [2.2.9.1 Survey Status Reports](#)). Survey Administrators can use submission rates to motivate nonrespondents to participate. For example, they can be included in the reminders sent to participants. We recommend displaying the numbers in a visual format (e.g., pie graphs) for added effect. If you are conducting the survey in multiple schools, you can imbue the reporting with a competitive aspect by publicizing the submission rates of each school. The same concept can be applied to a whole district or state, depending on the size of your administration.

Monitoring submission rates:

- Achieving a high response rate is important in order to avoid nonresponse bias. Nonresponse bias occurs when the views expressed by those who respond do not reflect the views of the entire population. For example, the first responders to a school's parent survey may be the parents who have most frequent contacts with the school and thus have the most positive view of the schools. If no effort is made to get the rest of the parents respond to the survey (i.e., increase response rate), the final parent survey results may be skewed toward more positive views of the school's climate.
- Please note that response rates and submission rates are often different from one another, for a variety of reasons. For example, a Survey Administrator may generate extra usernames, resulting in a higher denominator for the submission rate calculation. Certain cases are also treated differently in the calculation of response rates and submission rates. For example, respondents who log in to the survey but choose the opt-out feature will be considered to have completed a survey for the purposes of the submission rate, but are not technically considered respondents. Since the EDSCLS platform cannot produce response rates, submission rates should be used as a proxy for response rates.

Increasing submission rates:

- Reminder e-mails and/or letters can be sent to respondent groups to increase participation.
- Who sends the reminders to which respondent groups is best determined by relationship immediacy. As such, instructional staff are the best contact points for reaching out to parents/guardians, principals are best suited to influencing instructional and noninstructional staff, and district leaders are best suited to achieving full participation from principals.

Lackluster submission rates are most acute in parent surveys of school climate. Consider the following strategies to optimize parents'/guardians' submission rates:

- Emphasize the value/actionability of the data gathered and ensure confidentiality. The randomly generated usernames are not connected to any particular individual. The parents'/guardians' input is valuable because they are the only adult stakeholders in the school system who are not directly part of that school system.
- Teacher-parent conferences provide an opportune venue for parents/guardians to complete the survey. The instructional staff give feedback on the child's progress to the parents/guardians, and the parents/guardians can then provide feedback to the school about

its climate. We recommend designating a room with computers or tablets where parents/guardians can fill out the survey while they wait for their turn with the teacher or when they are finished with their conference. Provide personnel to assist those parents/guardians who are not familiar with computers or tablets.

- a. Be careful about soliciting parent input from only certain groups of parents/guardians (e.g., the parents at a PTA meeting). Such programs draw a narrower band of parents/guardians who are likely to be far more involved in their child's school than the average parent, leading to an overrepresentation of a subset of the population.

Nonresponse bias:

- When the response rate, by proxy of the submission rate,²⁰ is below 80 percent, a nonresponse bias analysis is recommended to determine whether or not the respondents to your study are representative of the population in your school, district, or state and to assess the potential magnitude of nonresponse bias. The analysis will help evaluate whether the data, or the reports based on the data, are biased by the missing respondents.
- EDSCLS administrators can use the frequency distributions of the demographic variables (grade, student only; race/ethnicity, and sex) that are included in the reports and compare them to a data source that includes the frequencies of these demographic variables for the total population. The nonresponse bias worksheet with embedded formulas is included in the EDSCLS package and can be used to carry out basic analysis. A worksheet for the student survey will look like this:

²⁰ Note that submission rates can differ from response rates (see footnote 16 above). The EDSCLS platform is only capable of tracking submission rates. Users who want to track response rates will need to determine the requirements for defining respondent status and calculate the response rates using the raw data.

Figure 4. Nonresponse bias worksheet for the student survey

Student Characteristic	Percent of respondents	Percent of students	Estimated bias	Relative bias
Grade				
5th Grade	12.5	12.0	0.5	0.0
6th Grade	11.9	12.0	-0.1	0.0
7th Grade	12.5	12.0	0.5	0.0
8th Grade	13.8	12.0	1.8	0.1
9th Grade	12.5	12.0	0.5	0.0
10th Grade	11.3	12.0	-0.7	-0.1
11th Grade	11.9	12.0	-0.1	0.0
12th Grade	12.5	12.0	0.5	0.0
Ungraded	1.3	4.0	-2.7	-2.1
Gender				
Male	50.0	45.0	5.0	0.1
Female	50.0	55.0	-5.0	-0.1
Race/Ethnicity				
American Indian or Alaska Native	10.0	2.0	8.0	0.8
Asian	5.0	7.0	-2.0	-0.4
Black/African-American	15.0	15.0	0.0	0.0
Native Hawaiian or Pacific Islander	5.0	5.0	0.0	0.0
Hispanic	20.0	20.0	0.0	0.0
Two or more races	5.0	1.0	4.0	0.8
White	40.0	50.0	-10.0	-0.3

- The “Percent of respondents” column indicates the characteristics of the respondents to the survey. The “Percent of students” column is extant information from the administrative data of the school or school system. The EDSCLS administrator should enter the demographic characteristics included at the end of the item frequency report into the “Percent of respondents” column, and comparable data from the administrator’s records should be entered into the “Percent of students” column. The “Estimated bias” column indicates, in percentage point terms, differences between the respondent and the overall student population. The “Relative bias column” indicates how large the bias is relative to the estimates from the “Percent of respondents” column. This analysis should also be done for other respondents – instructional staff, noninstructional staff and parents.
- In those cases in which the administrator has elected to preserve the link between the usernames and the identity of the students, student survey responses can be linked to other data sources the school/district/state may have to conduct more detailed bias analyses (using the additional student data to measure bias within the responding population as compared to the full population). Additionally, if the data are being collected at the district or state level, the administrator can add additional school and district data for additional analyses. If these additional data are used, the administrator would add the additional variables to the “Student Characteristic” column and drag the formulas in the “Estimated bias” and “Relative bias” columns to the row corresponding to the end of the list of characteristics.
- The bias is computed by subtracting each value in the “Percent of students” column (e.g., 12.0 for grade 5 students in the table above) from the comparable value in the “Percent of respondents” column (e.g., 12.5 for grade 5 students). The relative bias is the bias estimate for each row divided by the “Percent of respondents.” For any group of respondents, if the estimated bias is larger than 1 percentage point (greater than 1.0 or less than -1.0), the

survey data should be used with caution (e.g., 1.8 for grade 8 students). Administrators should also be cautious if the relative bias is larger than 0.3 or less than -0.3 (e.g., 0.4 for Asian students).

3.6 After the Data Collection Window Closes

The EDSCLS platform automatically produces a report of the results when the data collection window closes. However, if you wish to further analyze the data, you may export the raw data into a CSV file, accessible via Excel and many programming applications, to further analyze the data as needed.

Storage of the Data

The education agency that conducts the EDSCLS is responsible for storing the data in a secure manner. Any materials that directly or indirectly identify respondents should be kept in a locked compartment in a locked room when not in use.

Deletion or Preservation of the Data

The EDSCLS platform can be used for multiple cycles without deleting prior data collections, and the platform's tools allow the data to be sorted by administration. Keeping the data makes multi-administration comparisons easier by establishing trend lines. However, the data are ultimately the responsibility of the education agency that collected them and deleting or preserving them is at the discretion of that agency.

4. Instructions for in-School Administration of the Student Survey

Survey Administrators, School Survey Coordinators, and Survey Proctors should read the instructions in this section in advance of the first day of the administration window. The instructions in this section should be used as a guide in how to effectively and consistently administer the EDSCLS student survey. Note that students should take the EDSCLS survey in the controlled environment of a school, not at home or in any other uncontrolled environment.

Scheduling resources (e.g., time in computer labs; survey support staff)

- The student survey portion of the EDSCLS has been designed to be completed in a single 50- to 60-minute class period. This includes the time needed for the Survey Proctor to read the script to students (see [Appendix D](#)) and the students to log in and complete the survey. The survey administration procedures are designed so that Survey Administrators and School Survey Coordinators can follow typical computer lab/media center reservation procedures at their respective schools.

Accommodations for students

- The EDSCLS surveys are 508 compliant²¹ and schools should provide the same accommodations for students as are usually provided for student testing. These accommodations include magnifying devices, bilingual dictionaries, extended time, and small group administration.
- The EDSCLS student survey is provided in both English and Spanish. Other language accommodations, such as small group administrations with translators, should be offered to students who are not fluent in either English or Spanish.

Make-up dates for absent students and those needing additional time

²¹ The survey instrumentation adheres to the requirements in Section 508 of the Rehabilitation Act of 1973, as amended in 1998, which includes a set of standards by which electronic forms of governmental publications are made more easily accessible to people with disabilities.

- For student surveys, it is important to fold make-up dates into the data collection window, especially for large school-, district-, and state-level administrations. Absentees are inevitable, and a large enough number of them could introduce a nonresponse bias; for example, students who are frequently absent may not be as engaged in the school as others. Have at least one make-up day set aside for absent students as well as those who are not able to complete the survey in one class session. If possible, consider setting aside multiple make-up dates for larger administrations.

Setting the ground rules of the administration

- Students should be instructed to take a seat at a computer terminal of their choice and should be provided with a username for logging in to the survey.
- Students should be reminded to stay quiet throughout the survey to avoid distracting fellow classmates. If they have a problem logging in to the survey, they should raise their hands. If they have a question about the meaning of language used in the survey, they should do their best to figure out the intent—in order to ensure privacy and standardized administration, proctors cannot provide individualized help.
- When the above instructions have been given, the proctor should begin reading the Proctor Script (see [Appendix D](#)).

Assigning usernames and ensuring all students can log in to the survey platform

- It should be clear to students whether or not the proctor will be able to connect usernames to specific students. If the linkage to other student data is not planned, we recommend placing a username at each computer before the students arrive, and then allowing them to choose where they sit. If you prefer assigned seating, we recommend having students pick up a username from a stack as they walk into the room. If the linkage to other student data is planned, usernames will need to be handed out after students' names are verified. Use the standard administration procedures and conduct the surveys in settings that ensure students' privacy.
- The proctor should be free to move around the room until every student has successfully logged in and reached the welcome page. If a student has trouble, ask him or her to try the username again, paying careful attention to special characters and capitalization.
- Once a student logs in, the system will generate a PIN that can be used for re-entry to the survey. ***The PIN cannot be recovered by the Survey Administrator.*** Please instruct students to write down their PIN so that they can re-enter the survey at a later time. It is important that they write down the PIN, whether they think they will need it or not, because of the possibility of unforeseen circumstance, such as fire drills or the class period ending before a student can finish.

Accessing the survey in Spanish

- The EDSCLS platform has a bilingual toggle feature for the student (and parent) surveys. Students can click on the “English/Español” links above each question to select their preferred language.

Answering students' questions

- The proctor should help students log in, but not answer any questions about the wording of the survey items, since proctors cannot provide individualized help. If students are confused, please tell them to respond based on their best guess.

Closing out when the survey period ends

- It is best not to allow students to leave the class or surf the web upon finishing the survey as this may incentivize them to rush through it too quickly. Either ask them to sit quietly or give them an activity that will not disturb others (e.g., a reading assignment).

5. Frequently Asked Questions (FAQs)

The FAQs listed below are general questions and answers that may potentially be asked about the EDSCLS. The list was developed based on the experience of the EDSCLS team in administering school-based surveys via an online platform and will be updated after benchmarking data are available in fall 2017.

5.1 Survey Logistics and Administration

Q: *What questions do the surveys ask?*

A: The surveys cover a wide range of topics related to school climate, including questions concerning school engagement, school safety, and school environment. The surveys do not ask about the personal experiences of individuals, but rather, asks about their perceptions of safety, student engagement, and environment at the school.

Q: *How long will it take to complete the surveys?*

A: The length of time ranges per survey. The student, instructional, and noninstructional staff surveys take about 20 to 30 minutes to complete and the parent/guardian survey takes about 10 to 15 minutes.

Q: *Does the EDSCLS include a survey for staff, students and parents?*

A: Yes, the EDSCLS includes four surveys, one for each of four respondent groups: students in grades 5–12, their parents or guardians, and the instructional staff and noninstructional staff (including principals) in their schools.

Q: *Who should respond to the surveys?*

A: The surveys were designed with all relevant stakeholders in mind. As a result, the surveys are intended for all school staff, all students in grades 5–12, and the parents/guardians of those students.

Q: *Can we administer just one or some of the four surveys?*

A: You can. However, the EDSCLS is designed to be a suite of surveys to establish a baseline of school climate across all relevant stakeholders. We recommend the administration of the surveys to all respondent groups in order to obtain the most comprehensive picture of the school's climate.

Q: *When is the best time to administer the surveys?*

A: While local needs and context may vary, it is recommended that the surveys be administered sometime during the spring. All surveys should be administered during the approximately same time period across schools and respondent groups.

Q: *How frequently can the surveys be administered?*

A: There is no limitation to the frequency of survey administration in a given school year (i.e., the EDSCLS can be administered multiple times during the school year). However, to ensure consistency of data, the surveys should be administered during the same cyclical time frame each year.

Q: *How do I extend the length of a data collection after it has closed?*

A: Unfortunately, closed data collections cannot be reopened. However, you can employ a workaround by creating a new data collection and then importing the results of the second data collection into the first one (see [2.2.10 Respondent-Level Survey Results](#)).

Q: *Can the Survey Administrator be the same person as the Survey Coordinator?*

A: Yes, if there are only a couple of schools in the district or state collection or if the Survey Administrator can manage all of the survey activities (e.g., collecting contact information for respondents, reserving computer labs for student surveys) at each participating school. Generally speaking, if a district is hosting a survey, there should be one Survey Administrator at the district level and one Survey Coordinator/contact person in each school building.

Q: *Are there any other recommended standards related to how the surveys are administered?*

A: Recommended best practices can be found in the EDSCLS users' guide, but education agencies can develop their own procedures and standards or follow any procedures and standards that are used for any kind of testing or surveys.

Q: *How does the platform enable parents to complete the survey? For example, is it something they can complete from home?*

A: If the server at your site allows access to the EDSCLS URL from outside of your network, parents (or any respondent) can take the survey from any computer or mobile device (including smartphones).

Q: *Are there paper versions of the questionnaires available to look at?*

A: The questionnaire items are available to be reviewed on paper, but the surveys will need to be answered online so that the EDSCLS platform can process and report the survey results.

Q: *What are the accommodations for students with disabilities or English language learners?*

A: The EDSCLS platform is 508 compliant²² and is programmed so that the student and parent/guardian surveys can be completed in either English or Spanish. Schools should consider providing the same special accommodations to students as those provided in other assessments (e.g., translation services, extended time, and magnification devices). A makeup date should be set up for absent students as well as those who do not finish the survey during the originally scheduled time. Each school or district is free to schedule this session at their convenience, as long as it falls within the survey administration window.

Q: *Do we need to survey "all" students or can we use scientific sampling?*

A: We recommend a universe data collection. If you would like to draw a sample for data collection, please make sure the sample is a representative portion of the population and a sampling statistician is consulted.

Q: *What is considered an acceptable response rate for the parent survey?*

A: Parents are a difficult group to get to respond to surveys. If the response rate is below 80 percent, a nonresponse bias analysis is recommended to determine whether or not the respondents to your study are representative of the population in your school, district, or state and to assess the potential magnitude of nonresponse bias. Please consider using creative ways to contact and engage parents in the survey.

5.2 Technical Platform Capabilities

Q: *Will schools or state agencies need to dedicate an entire server to use the platform (or are the technical requirements less burdensome than that)?*

A: A server dedicated only to the EDSCLS will not be necessary to utilize the full functionality of the platform.

²² Section 508 of the Rehabilitation Act of 1973 includes a set of standards by which electronic forms of governmental publications are made more easily accessible to people with disabilities.

Q: *Does my site have the technical infrastructure needed for the EDSCLS data collection?*

A: The EDSCLS require a high-speed internet connection with at least 2 Mbps upload and download speeds and a static IP and URL to which to bind the website hosting the survey.

Q: *My site has a spare desktop/laptop computer that seems to meet the basic hardware requirements. Can I install the EDSCLS platform on it and run the data collection from there?*

A: No, you will need to have a static IP and URL for the EDSCLS.

Q: *Can I install the EDSCLS platform in a VMWare environment?*

A: The platform is distributed as a virtual disk in VMDK format, which is supported by both VirtualBox and VMWare. Instructions are provided for using VirtualBox, which is free software. It is possible to use VMWare as well, but if that is done you can no longer use VirtualBox, and must rely on your own personnel to manually create the VMWare virtual machine from the provided virtual disk. Furthermore, you may run into conflicts since VirtualBox uses different guest services, which are already installed on the virtual disk. Some have experienced corrupted filesystems, so additional expertise is recommended if you choose this route.

Note: It must be emphasized that you cannot expect to install VirtualBox with the EDSCLS virtual machine on another virtual machine provisioned from within the VMWare environment. That would constitute a virtual machine inside a virtual machine, which is not supported. To use VirtualBox, it must be installed on a physical server that does not have another hypervisor installed (such as VMWare or Hyper-V).

Q: *How can I protect my EDSCLS VM from cyber-attacks?*

A: To protect your EDSCLS VM from cyber-attacks, you can do one of three things:

1. Power your current EDSCLS VM off after completing your entire data collection. See User Guide, Step 11 of Subsection C under [Section 2.1.1 Installation and Configuration](#) for instructions. The VM can be powered back on if needed. Before conducting the next data collection, you could then download the latest version of the EDSCLS VM and use that.
2. Download and reinstall the latest version of the EDSCLS VM, including exporting data from the old VM and importing data into the new VM.
3. Manually apply security patches and upgrades from the EDSCLS VM terminal command line. See the User Guide [Section 2.1.5 Security Patches and Upgrades](#) for details. Note: Security patches and upgrades should NOT be applied during data collection.

Q: *How many concurrent respondents can the EDSCLS platform support?*

A: The EDSCLS works best for 150 or fewer concurrent respondents, but up to 500 concurrent respondents can be supported if dual servers are used. Please see [Section 2.1 System Setup in Virtual Environment \(for IT Staff\)](#) for more information.

Q: *Can I modify/remove questions I don't want?*

A: Modifying or removing survey questions will potentially affect the psychometric properties of the EDSCLS scales, thereby posing significant risks to the comparability of results across education agencies. Specifically, the questions to be offered in the EDSCLS are intended to produce psychometrically validated scales, and it is crucial for the statistical validity of those scales that all questions remain in the survey. As a result, schools and districts will not be able to alter the questions that are currently part of the EDSCLS.

Q: *Can I add additional questions?*

A: Yes, the platform allows education agencies to add questions in the same multiple-choice format to the end of the surveys. The platform will not provide any reporting on these additional questions. However, education agencies can export the data files and perform additional analysis and reporting outside of the system. Also, it is not possible to import data from additional questions into a data collection.

Q: *What kind of information does the survey platform provide during live administrations?*

A: The EDSCLS platform provides access to real-time submission rates at the school level. These submission rates are determined based on the number of respondents in each population who have submitted the survey and the education agencies' reports of the number of expected respondents in each population (i.e., the number of respondent usernames generated)²³ at the school level. The platform also allows administrators to identify those usernames that have not been used, those usernames for which a survey has been started but not completed (submitted), and those usernames for which a survey has been completed (submitted).

Q: *Can surveys results be linked to outside data systems?*

A: The EDSCLS platform can't be linked to any other data system. However, student data, after being exported from the platform, can potentially be linked to external data sources (such as those containing data on student achievement, graduation rates, and absenteeism) if the linking between student names and their usernames is retained during the username assignment stage outside of the EDSCLS platform.

Q: *How do I change the level of the data collection (i.e., school, district, state) if I have already set it previously?*

A: Unfortunately, it is not possible to change the level of the data collection once it has been set. As a possible workaround, consider creating a new data collection at the correct level and importing the data from the original data collection.

Q: *How do respondents acquire usernames to log in to an EDSCLS survey?*

A: After the EDSCLS platform has been installed and the data collection set up, a Survey Administrator can generate however many usernames he or she decides will be needed. The usernames can then be exported and disseminated manually or paired up with e-mail addresses and disseminated via the platform's e-mail system.

Q: *Is there a cutoff score for positive or negative school engagement?*

A: There are no cutoff scores, but the updated platform to be released in fall 2017 will include benchmark data that will help you interpret the meaning of your scores.

5.3 Privacy and Data Security

Q: *Is the survey anonymous?*

A: The system will generate random usernames. If you randomly disseminate the usernames to students, parents, and staff and do not keep track of which respondent receives which username, the survey will be anonymous. Note that in the parent and staff surveys, usernames are removed from the data file, so there is no possibility of tracing responses back to an individual respondent. If an education agency plans to link student responses to existing data

²³ Submission rates are determined based on the number of respondents in each survey population who have logged in to the survey and submitted it (whether they chose to respond to questions or not) divided by the number of usernames generated for each survey population.

systems, it will need to keep track of which usernames were assigned to which students outside the EDSCLS platform. In this case, the student survey would not be anonymous.

Q: *How does the EDSCLS address parental consent?*

A: The EDSCLS user's guide includes sample parental consent forms (active or passive) in [Appendix E](#). Please refer to relevant laws in your state and locality in deciding which form to use.

Q: *Does the Protection of Pupil Rights Amendment's (PPRA) active consent requirement apply to these surveys?*

A: The PPRA requirement only applies to data collections conducted by the federal government. While the EDSCLS was developed by the U.S. Department of Education (ED), ED does not collect the data nor does it have access to the data. Therefore, only state and local consent requirements apply.

Q: *Who will be responsible for the data collected? Where are the data stored?*

A: Depending on which education agency is hosting the survey administration, either the state, local school district, or individual school will be responsible for the data collected. These data will be stored on the respective state, district, or school server.

Q: *Do we need to obtain any additional approval for administering the survey?*

A: It is the responsibility of the education agency that is administering the EDSCLS to check whether additional approval is required by the state or locality (e.g., from an Institutional Review Board).

6. Understanding the EDSCLS Scales

This section provides education agencies with some basic information about the EDSCLS scales. The EDSCLS surveys measure three domains—Engagement, Safety, and Environment—and 13 subdomain topical areas (see figure 4 in [Appendix A](#)). For the student, instructional staff, and noninstructional staff surveys, the aim is to measure most of the topical areas with scales; these topical area scale scores are consolidated into the domain scores (Engagement, Safety, and Environment). **Not all of the survey items are included in the scale score calculations.** The items that are not included in the scale scores are noted in the [Survey Item Lists](#) and [Code Books](#) available online on the [EDSCLS administration](#) page. No scales were created for the emergency readiness and management topical area in all three surveys and the physical health topical area in the student survey. No scales were created for any of the topical areas in the parent survey.

For each domain and topical area in the EDSCLS surveys, scale score reports in the EDSCLS system are available for each respondent group immediately after the close of data collection. For each respondent group, individual responses of all completed surveys will be aggregated by topical area and graphically presented at the education agency level. The scale scores are also reported by subgroups (e.g., race, gender, grade) within each category of respondent.

The EDSCLS platform will produce graphical displays of scale scores for domains and topical areas. The use of scale scores to represent school climate measurements can be thought of as similar to SAT or ACT scores, where the raw value is meaningful in its relation to a comparison point. The graphical presentation of these scores will show the average score across a particular respondent group on the scale and the school average (see [2.2.9.2 Survey Results Reports](#)). The comparisons can be made among subgroups within any scales.

In the event that there are very few respondents overall or in a subgroup (for example, if there is only one respondent of a certain race/ethnicity), reporting might result in indirect disclosure of a

respondent's identity. To minimize the risk of disclosure to respondents while providing as much usable information as possible, scale scores for any respondent group or subgroup with fewer than 10 respondents will be suppressed.²⁴

The updated platform to be released in fall 2017 will include benchmark data that will help you interpret the meaning of your scale scores.

²⁴ In place of the graph, a note will be displayed: "Item not shown due to disclosure risk."

Appendix A: What Does the EDSCLS Measure?

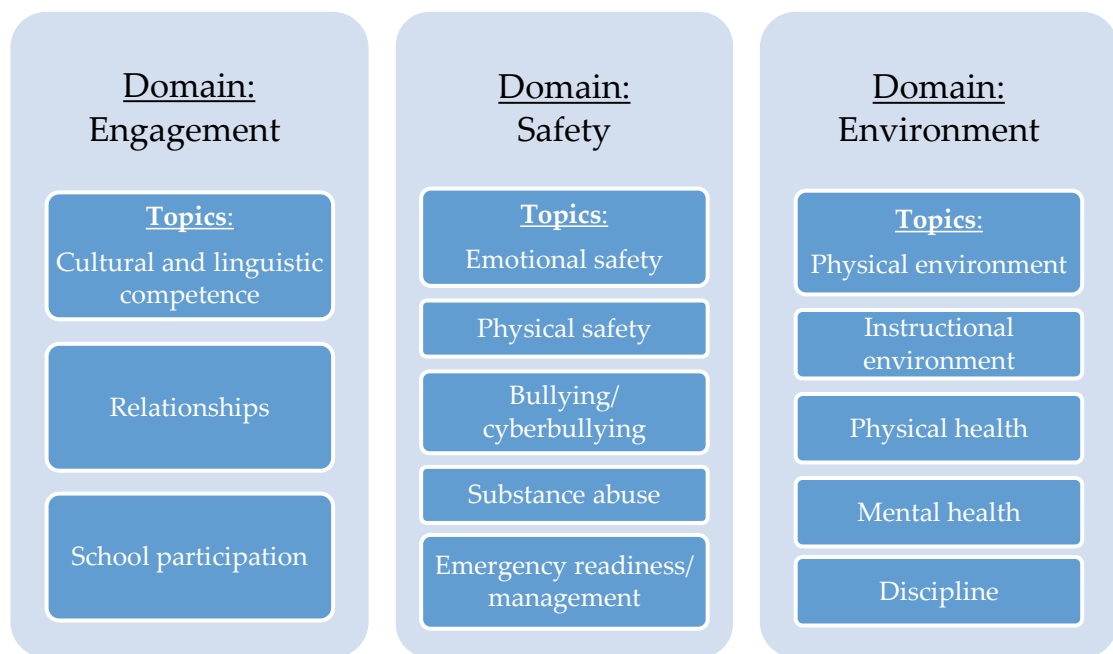
Appendix A.1 – EDSCLS Research Base (content)

Appendix A.2 – EDSCLS Research Base (references)

A.1: EDSCLS Research Base (content)

Three domains—Engagement, Safety, and Environment, and their associated topical areas—form the EDSCLS model of school climate (figure 4). Each of these domains and topical areas is measured in each of the four survey instruments. Some of these domains and topical areas are closely related to one another and include similar concepts—EDSCLS takes a panoramic approach in order to fully map the composition and influences of a school’s climate. The remainder of this section provides a brief description of each domain and topical area and demonstrates its connection to the broader construct of school climate.

Figure 4. EDSCLS model of school climate



Engagement

Engagement includes several components of “school connectedness,” such as the amount of effort students expend in the work of learning, their sense of belonging, and their emotional involvement with the school (Marks 2000). The amount of effort students devote to schoolwork is critical to their academic success because grades encapsulate not just mastery of content, but also labor invested (e.g., homework assignments, class participation, and extra-credit assignments) (Willingham, Pollock, and Lewis 2002). The rapport built between students and the important people in their lives at school establishes an important foundation for students’ perceptions of academia. As Blum (2005b, p. 4) observed, “people connect with people before they connect with institutions”—thus, positive relationships with instructors can contribute significantly to how much students value instruction. Data from the National Education Longitudinal Study of 1988 (NELS:88) also lend significant credence to the power of teacher-student relationships: they show that positive student beliefs about how much their teachers support their efforts to succeed in school are related to a reduction in the probability of students dropping out (Croninger and Lee 2001).

In the EDSCLS, engagement constitutes three topical areas: cultural and linguistic competence, relationships, and participation.

Cultural and Linguistic Competence

Cultural and linguistic competence involves the degree to which students and families from diverse backgrounds feel welcome and connected to their school. When teachers seek to engage in unbiased instruction and to learn about their students, they can better respond to their students' needs (Gay 2010; Richards, Brown, and Forde 2004; Villegas and Lucas 2002). Ruus et al. (2007) found that the school value system and students' perceptions of teacher attitudes were significantly associated with students' optimistic acceptance of life, psychological and physical well-being, and academic success.

Relationships

Positive relationships between students, adults, and peers are characterized by affirmative social interactions, leading to a nurturing environment of trust and support. When coupled with a consistent emphasis on academic performance, a strong sense of support and school community has been positively associated with improved academic achievement (Lee et al. 1990). The quality of relationships is also important to faculty job satisfaction. A qualitative study by Hargreaves (2000) found that teachers cite their relationships with their students as one of the most important aspects of their work. In addition, teachers say that their job satisfaction is also contingent on their relationships with parents (Shann 1998).

School Participation

Participation encompasses all of students' efforts in the school context, ranging from class participation to extracurricular activities. Parents and staff also participate in school in various ways, such as through collective decision making and student instruction. Strong interconnectedness between staff, students, families, and school—as demonstrated by student participation in self-directed or cooperative activities—can contribute to a positive climate (Cohen 2006; Cohen et al. 2009). Meaningful participation at school cultivates students' self-efficacy, decision-making and leadership skills, and personal talents and strengths (Jennings 2003; Holland and Andre 1987).

Safety

Emotional and physical safety are fundamental characteristics of high-quality schools; in these schools, students feel a sense of belonging and are free to focus on learning (Dwyer and Osher 2000). Conversely, unsafe schools are associated with student and teacher victimization, increased truancy, lower levels of school attachment, decreased graduation rates, and increased disciplinary problems (Arseneault et al. 2006; Astor, Guerra, and Van Acker 2010; Bowen and Bowen 1999; Chen 2007; Henrich et al. 2004; Juvonen, Nishina, and Graham 2000; Neild, Furstenberg, and Stoner-Eby 2002; Mayer and Furlong 2010). Current research also suggests that the perception of physical and emotional safety is directly related to academic achievement (Glew et al. 2005; Osher and Kendziora 2010; Ripski and Gregory 2009). The positive effects of safe schools influence school staff as well. Gregory and colleagues found that cumulative daily stress—forged by disrespectful behavior and obscene remarks from students—has serious implications on teachers' mental health (Gregory, Cornell, and Fan 2012); such abuse is directly linked to, and may be an important cause of, their premature retirement (Bauer et al. 2006).

In the EDSCLS, the safety domain includes five topics: emotional safety, physical safety, bullying, substance abuse, and emergency readiness and management.

Emotional Safety

Emotional safety is the actual and perceived experience of feeling safe to express emotions and the confidence to take appropriate academic risks (Blum 2005a; Osher and Kendziora 2010). This aspect of safety contributes to a school's climate of mutual respect, trust, and equitable treatment

among all members of the school community. Perceptions of respect, trust, and fairness are linked with school interconnectedness (i.e., a sense of community) (Blum 2005a; Resnick et al. 1997; Chapman et al. 2011). The experience of interconnectedness bonds students to schools, enhances well-being, and reduces risky and antisocial behavior (Battistich and Hom 1997; Frey et al. 2009; Libbey, Ireland, and Resnick 2002; McGraw et al. 2008).

Physical Safety

Physical safety is predicated on protecting students from being victims of or witnesses to violence. There is a long history of research on the importance of safety to individuals' social and emotional growth, including Abraham Maslow's (1954) hierarchy of needs, wherein safety and security are ranked second only to basic physiological needs. In order for students to focus on and learn about abstract concepts, they must be free from worry about their physical safety. In schools where students reported higher levels of safety, a higher percentage of students passed standardized tests, even after controlling for free or reduced-price lunch status (Milam, Furr-Holden, and Leaf 2010).

Bullying

Bullying constitutes unwanted and aggressive actions directed from one person to another; the definition of bullying also involves a real or perceived power imbalance between the two parties, with the actions being repeated or having the potential to be repeated (Olweus 1997). *Cyber-bullying* is a recent permutation, wherein electronic devices—such as cell phones, computers, and tablets—are used to target the victim. Bullying undermines perceptions of safety (Sampson 2009, p. 1), and student-student and student-teacher relationships (Swearer et al. 2010), making bullying prevention important for fostering a positive school climate (Cohen and Freiberg 2013; Thapa et al. 2013).

Substance Abuse

Substance abuse is a harmful pattern of using substances such as alcohol, tobacco, illicit drugs, or prescription drugs. This behavior carries the risk of directly causing or aggravating physical and mental health issues, impeding the cognitive growth necessary for academic success, and fomenting substance dependence. According to the National Center on Addiction and Substance Abuse (2001), "it is estimated that each year substance abuse costs schools at least \$41 billion in truancy, special education, and disciplinary problems; disruption; teacher turnover; and property damage."²⁵

Emergency Readiness and Management

Emergency readiness entails a school's preparedness to respond to a crisis or to an emergency such as a natural disaster, a violent incident, or an act of terrorism (National Child Traumatic Stress Network 2013). According to the U.S. Department of Education (2013), emergency readiness includes prevention, protection, mitigation, response, and recovery. Fostering a positive school climate can help prevent emergencies—because it can reduce the incidence of behaviors that contribute to crises (e.g., violence, bullying, harassment, substance abuse)—and help students respond to and recover from emergencies (U.S. Department of Education 2013). Additionally, Cornell and colleagues found that having a threat assessment program was associated with having a more positive and supportive school climate (Cornell et al. 2009).

Environment

Positive school environments are characterized by appropriate and well-maintained facilities; well-managed classrooms with high levels of engagement, rigor, productivity, and inclusion; a range of available school-based health supports; clear, fair disciplinary policies; and explicit policies and procedures governing various school practices (Hamre and Pianta 2005; Welsh 2001). In addition

²⁵ This is equivalent to \$54.2 billion in 2014 dollars.

to the resources and beneficial normative experiences provided to students through support staff, positive school environments also afford faculty varied and diverse opportunities to meet students' physical and mental health needs during the regular and extended school day (Hoagwood and Erwin 1997; Physical Activity Guidelines Advisory Committee 2008; Stevens et al. 2008; Telford et al. 2012). A significant body of research suggests that different characteristics of the school environment (including elements of order, facilities, school rules, and discipline) influence student, adult, and school outcomes, both directly and indirectly (Buckley, Schneider, and Shang 2005; Gottfredson et al. 2005; LeBlanc et al. 2007; Lo et al. 2011; Payne 2008; Payne, Gottfredson, and Gottfredson 2003; Planty and DeVoe 2005; Roque and Paternoster 2011; Tillyer, Wilcox, and Gialopsos 2010; Wang and Dishion 2011).

In the EDSCLS, the environment domain consists of five topical areas: physical environment, instructional environment, physical health, mental health, and discipline.

Physical Environment

A school's physical environment encompasses the physical appearance and functioning of the building, including lighting (artificial and natural), thermal comfort, air quality and ventilation, acoustics and noise control, size and configuration of rooms, permanent versus portable rooms, safety measures (cameras, signage, metal detectors, etc.), location, and neighborhood surrounding it (Earthman 2004; National School Boards Association 1996; O'Sullivan 2006; Planty and DeVoe 2005; Schneider 2002). The condition of school facilities is highly correlated with teacher retention (Buckley, Schneider, and Shang 2005), as well as student health and academic achievement (Earthman and Lemasters 2011; Uline and Tschannen-Moran 2008). Studies show that children are more susceptible to environmental disease than are adults, increasing the importance of maintaining clean facilities (Jasper, Thanh-Tam, and Bartram 2012).

Instructional Environment

The instructional environment refers to the interconnectedness of the academic, social, and emotional aspects of learning as they relate to student achievement (Bronfenbrenner 1979; Ma et al. 2009), including such things as the quality of instruction, the quality and availability of materials and resources, the level of expectations for academic achievement, a shared sense of responsibility, student engagement and connection with the curriculum, positive classroom management strategies, and a focus on building strong teacher-student relationships (Ladson-Billings 1995; Cohen 2006). Extensive research by the Organization for Economic Cooperation and Development and others has linked positive instructional environments to higher student test scores and graduation rates, higher reading scores, and lower dropout rates (Haahr et al. 2005; Organization for Economic Cooperation and Development 2009).

Physical Health

In the EDSCLS, physical health refers to the physical well-being of a school community and its members. Poor health obstructs children's education by driving excessive absenteeism, impeding completion of homework, and inhibiting teacher-student relationship growth (Needham, Crosnoe, and Muller 2004). Given the amount of time that students spend on school grounds, school health programs have the potential to be one of the most efficient means to prevent or reduce health risk behaviors and serious health problems among students (Centers for Disease Control 2011).

Mental Health

Mental health is more than just being psychologically well; it includes emotional and social well-being and is affected by many different factors (mentalhealth.gov). Mentally healthy students attend school ready to learn, are actively engaged in school activities, form supportive and caring relationships with adults and peers, apply problem-solving skills in a nonaggressive manner, and

contribute to positive school culture (Freeman 2011; National Research Council and Institute of Medicine 2009).

Discipline

School discipline is defined as the rules and strategies applied in school to manage student behavior and the practices used to encourage self-discipline (Osher et al. 2010). Approaches to school discipline range from positive (e.g., improvements in school climate and the use of restorative justice practices) to punitive (e.g., suspension, expulsion, and corporal punishment) (Gottfredson et al. 2005; Mayer 1995; Skiba et al. 2011). Emerging research supports focusing on the former more than the latter, because punitive school discipline has not been shown to improve student behavior or academic achievement (Fabelo et al. 2011; Rebola 2013; Shah 2011). Schoolwide positive approaches have been associated with reduced disciplinary referrals and improvements in student academic achievement (Lassen, Steele, and Sailor 2006). Using positive approaches when discipline issues arise is hypothesized to reconnect students to their peers and teachers, improving the school experience for the community.

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Appendix B: Features of the EDSCLS Platform

The EDSCLS will not be used to establish a national data collection and reporting system. Through the EDSCLS platform, school, district, and state education agencies independently administer the EDSCLS surveys, which means that there is no one organization (e.g., NCES) overseeing the data collection and ensuring that consistent procedures are implemented across schools. This lack of centralized oversight has the potential to threaten the validity of the results and interpretation of scale scores. Therefore, the EDSCLS platform has been programmed with a focus on building in key features that should be implemented in a uniform manner across all collections.

B.1 Availability of Survey Link and Automated Dissemination of Usernames

The platform allows respondents to access their survey through a URL that can be accessed from any location with internet access and from all standard operating systems and browsers. However, the student surveys are intended to be administered in schools to help control the environment of the student respondents.

To allow potential respondents to follow a link to the survey platform, the platform offers education agencies the option of disseminating usernames by e-mail directly from the platform. The e-mails can be generated and sent directly from the platform; they contain log-in information for each e-mail address and/or a link to the log-in page of the survey (the link will be the same for every respondent). Although e-mail addresses are matched with randomly generated usernames, these e-mail addresses are deleted from the database after the data collections are closed and, therefore, will not be linked to respondents within the platform to protect respondent confidentiality.

B.2 Informed Consent

The EDSCLS is designed as a voluntary survey and incorporates informed consent/assent procedures; therefore, the need to obtain consent was considered during the development of the platform. For adult populations, obtaining consent is generally a straightforward process by which respondents receive information regarding the survey (including the purpose of the study, the extent to which confidentiality will be maintained, and other elements of informed consent) and, upon indicating their agreement to participate, begin the survey. For student populations, however, obtaining informed consent can require additional steps. Local education agencies administering the surveys should follow the appropriate procedures regarding parental consent that are used for any kind of surveys or testing in the school or school system. In the survey platform, students are presented with assent language that is appropriate for their age. This assent process is built into the surveys; similar to the adult populations, students are provided with information about the data collection and asked to participate. The prefilled consent/assent language can be edited by local education agencies based on their situations or practices.

Draft Confidentiality Language for School Climate Survey

Under the Protection of Pupil Rights Amendment, 20 U.S.C. § 1232h(c)(1)(A), any school district that will be administering the School Climate Survey must have developed and adopted policies, in consultation with parents, that allows parents to inspect, upon request, the Survey before it is administered or distributed by a school to a student and have in place procedures for granting such parental requests. The school or school district also should ensure that parents understand how the Survey responses will be used.

For privacy and data quality reasons, the U.S. Department of Education recommends that the Survey responses only be used in an aggregated, de-identified manner. However, if the school or school district administering the Survey decides to link the Survey responses with additional student information in a way that would make the Survey responses identifiable to a student, then

the Survey Administrator should clearly indicate in advance that the Survey responses will be maintained in individually identifiable form. Furthermore, the Survey Administrator should clearly indicate that any individually identifiable information that is so maintained will be protected under the provisions of the Family Educational Rights and Privacy Act (FERPA), 20 U.S.C. § 1232g, and may be disclosed in identifiable form to third parties in accordance with FERPA. For example, as part of the students' education records these linked Survey responses may be disclosed to parents upon request, to school officials with legitimate educational interests, or to other third parties for studies to improve instruction or to evaluate federally or state-supported education programs.

B.3 Spanish/English Bilingual Feature

The EDSCLS platform offers Spanish and English versions of the parent and student surveys. The EDSCLS platform allows these respondents to toggle between English and Spanish versions of questions at any point in the survey, giving them the option to answer different questions in different languages. The instructional staff and principal/noninstructional staff surveys are offered in English only.

B.4 Survey Page Design

An important design issue of web-based surveys, with implications for question-level response rates, is the number of questions displayed on each survey page. If too many questions are included on each survey page (or if the questions are poorly formatted to accommodate different screen sizes and resolutions), it is more likely that a respondent will be required to scroll down or across the page to view the question. This, in turn, can increase the likelihood that a respondent will fail to answer these questions. The EDSCLS platform contains only one question per page to allow for responding to surveys on mobile devices, such as smart phones or tablets.

B.5 Real-Time Submission Rates

The EDSCLS platform provides access to real-time submission rates at the school level. These submission rates are determined based on the number of respondents in each population who have logged in to the survey and the education agencies' reports of the number of expected respondents in each population (i.e., the number of respondent usernames generated).

The need to maintain respondent confidentiality and data security means that the platform cannot supply education agencies access to information about which respondents have completed the survey directly from the platform. The platform does, however, allow authorized users to export a list of usernames by completion status (e.g., a list of usernames not used). This information can be used by education agencies that have linked EDSCLS usernames to respondents in order to determine completion status at the respondent level and target nonresponse follow up as needed.²⁶

B.6 Data Export

To maximize the utility of the EDSCLS data, the platform allows authorized users to download respondent-level data for all questions and scales. The initial usernames are included only with the student data. Those education agencies that have created a crosswalk between usernames and student identifiers can link individual-level student data to extant data (such as student administrative records) for further analyses. The data download process requires that the EDSCLS administrator read and acknowledge a statement that these data contain private, identifiable

²⁶ The ability to track submission rates does not mean administrators can track individual responses. Upon the completion of a data collection, when the results can be viewed, username credentials for parents, teachers, and noninstructional staff are removed from the data and replaced with random IDs to decouple answers from personally identifiable information. Administrators do have the option of maintaining student usernames so that they can link individual student responses to other datasets, such as achievement levels.

information and must be handled in accordance with applicable confidentiality and privacy regulations. The data export functionality (and associated data import functionality) also allows schools to send data to districts for the purposes of creating district-level reports and allows districts to send data to states for the same purpose.

B.7 Platform Features Considered But NOT Included

Based on the recommendations and requests of key informants (and the experience of AIR's staff in administering school climate and other school-based surveys of students, parents, and staff), several design features were considered for integration into the EDSCLS platform. These platform features were considered advantageous, but could not be implemented because they conflicted with the platform goals described above or were outside the scope of EDSCLS's objectives. Below we briefly describe these features, their potential advantages, and why they were not directly integrated into the EDSCLS platform.

B.7.1 Preloading of Respondent Data

Education agencies may desire a survey platform that allows respondent data to be preloaded into the platform rather than requiring respondents to enter the information. However, such a design feature could not be implemented for three reasons. First, risk to the confidentiality of responses would increase if EDSCLS responses were linked to identifiable records within the platform. Second, it gives the impression that the EDSCLS surveys and platform can be used to create a federal database of identifiable student information, which, if implemented, would violate federal regulations. Third, accommodating preloaded data to be used during survey administration would require significant custom programming—e.g., not all schools use the same staff role titles, so it would be difficult to ensure that all preloaded data would route staff to the appropriate role-based survey questions—that is outside the scope of EDSCLS's objective.

B.7.2 Reporting of Data by Detailed Respondent Subgroups

Enabling education agencies to break down the survey results by respondent characteristics (such as gender, grade, race/ethnicity, gifted and talented status, special education status, and English language learner status) would allow them to assess perceptions of school climate in more detail and potentially create more targeted programs and policies to improve school climate. However, the potential for a breach in respondent confidentiality and data security outweighs the potential benefit. Additionally, statuses such as gifted and talented, special education, and English language learner may not be reliably reported by respondents. As such, the platform is only designed to allow agencies to view the student survey results by limited demographic characteristics, such as grade, gender, and race/ethnicity. In order to maintain respondent confidentiality and data security, appropriate U.S. Department of Education Disclosure Review Board standards have been applied to resultant reports generated from the EDSCLS platform. If education agencies wish to perform more detailed subgroup student reporting, respondent-level data can be exported from the platform for this purpose, leaving the education agency responsible for ensuring proper confidentiality protections.

B.7.3 Customization of Survey Content

Allowing end users to customize their survey administrations by modifying or deleting questions may be an attractive option to obtain maximum utility from the EDSCLS platform and surveys. However, modification or deletion of survey content could potentially affect the psychometric properties of the EDSCLS scales, thereby posing significant risks to the comparability of results across education agencies and to using benchmark data to interpret the meaning of scale scores. Specifically, the questions to be offered in the EDSCLS are intended to produce psychometrically validated scales, and it is crucial for the statistical validity of those scales that all questions remain in the survey. The platform allows education agencies to add questions, in the same multiple-choice form, to the end of the surveys. The platform will not provide any reporting on these

additional questions. However, education agencies can export the data files and perform additional analysis and reporting outside of the system.

Appendix C: Confidentiality Pledge for Survey Proctors (sample)

I hereby certify that I have carefully read and will cooperate fully with the EDSCLS procedures on confidentiality. I will keep completely confidential all information arising from surveys concerning individual respondents to which I may gain access. I will not discuss, disclose, disseminate, or provide access to survey data and identifiers. I give my personal pledge that I shall abide by this assurance of confidentiality.

My signature below indicates I have read and agree to the Pledge of Confidentiality

Signature: _____ *Date:* _____

Printed Name: _____

Appendix D: Proctor Script for in-School Student Survey (sample)

Good morning/afternoon.

You're here because the [school/district] wants to conduct a survey to hear your opinions about your school. The survey will ask your opinion on questions ranging from student engagement, to bullying, to the conditions of the school building itself. Your answers will be used to improve the school experience for you, your fellow students, and your teachers. Your teachers, and in fact all the staff in your school, will also have the chance to voice their opinions on similar surveys. Even your parents will receive a survey and the chance to have their say.

Your [school/district] wants to hear from everyone, so your participation is very important. But it's also voluntary. You do not have to take the survey and you can skip any question you don't want to answer.

Please answer the questions as best you can. If you are unsure about the meaning of a survey question, do your best to answer it on your own. In order to maintain privacy, I will not be able to help you interpret the meaning of questions. Similarly, you should not ask other students or look at their responses.

When you have finished the survey, please sit quietly and do not disturb your fellow students.

Now, take the username in front of you, and use it to log in to the survey. Write down the PIN number that is given to you on the screen. You will need this to go back and finish the survey if you are interrupted for some reason. You are the only person who has access to this PIN and there is no way to look it up, so make sure you write it down and keep it safe. Do not begin the survey until instructed. Once I have made sure everyone has successfully logged in and written down the PIN displayed on the page, I will move to a part of the room where I cannot see anyone's answers, and at that time I will instruct you to begin.

...

Now that everyone has reached the PIN page, please begin.

Appendix E: Consent Forms (sample)

Please refer to your state's and locality's informed consent laws in deciding which consent form to use.

Appendix E.1 – Parent Consent Form I (Opt-in NOT Required)

Appendix E.2 – Parent Consent Form II (Opt-in Required)

E.1 Parent Consent Form I (Opt-in NOT Required)

Dear parent/guardian:

<Education Agency> is conducting a voluntary survey about school climate. The survey will be administered to students during regular school hours during the week of <WEEK OF ADMINISTRATION>. It will ask students about their perceptions on topics such as student engagement, school environment, and school safety.

The data your child provides may also be used by the school and district to better understand the current climate in their school. The only people who will see your child's answers to individual questions are authorized personnel at their school and district. Your child's answers will be combined with the answers of other students at their school and district and used to create records about the climate of their school. These reports will not identify any person or their responses.

If you do not want your child to participate in this survey, please complete, sign, and postmark this letter using the enclosed postage-paid envelope by <DEADLINE DATE>. If you sign and postmark this letter by <DEADLINE DATE>, it means your child will not participate in the survey and will be asked to report to a designated place in the school (for example, the library) while the survey is being administered.

If you have any questions about this study or about your child's participation or would like to see a copy of the student survey, please contact <ADMINISTRATOR NAME> at <ADMINISTRATOR NUMBER>. If you have any questions about your child's rights as a participant in this study, please contact <SCHOOL CONTACT INFO>.

I understand that by completing and signing the form below and returning this letter, my child will not be allowed to take the School Climate Survey.

Parent/Guardian Signature: _____ Date: _____

Student Signature: _____ Date: _____

Student Printed Name: _____ Date of birth: _____

If you agree to allow your child to take the survey, you do not have to sign or send back anything.

Sincerely,

<ADMINISTRATOR NAME>

E.2 Parent Consent Form II (Opt-in Required)

Dear parent/guardian:

<Education Agency> is conducting a voluntary survey about school climate. The survey will be administered to students during regular school hours during the week of <WEEK OF ADMINISTRATION>. It will ask students about their perceptions on topics such as student engagement, school environment, and school safety.

The data your child provides may also be used by the school and district to better understand the current climate in their school. The only people who will see your child's answers to individual questions are authorized personnel at their school and district. Your child's answers will be combined with the answers of other students at their school and district and used to create records about the climate of their school. These reports will not identify any person or their responses.

If you agree to allow your child to participate in this survey, please complete, sign, and postmark this letter using the enclosed postage-paid envelope by <DEADLINE DATE>. If you sign and postmark this letter by <DEADLINE DATE>, it means your child will participate in the survey and will be asked to report to a designated place in the school (for example, the computer lab) where the survey will be administered.

If you have any questions about this study or about your child's participation or would like to see a copy of the student survey, please contact <ADMINISTRATOR NAME> at <ADMINISTRATOR NUMBER>. If you have any questions about your child's rights as a participant in this study, please contact <SCHOOL CONTACT INFO>.

I understand that by completing and signing the form below and returning this letter, my child will be allowed to take the School Climate Survey.

Parent/Guardian Signature: _____ Date: _____

Student Signature: _____ Date: _____

Student Printed Name: _____ Date of birth: _____

If you do not want your child to take the survey, you do not have to sign or send back anything.

Sincerely,

<ADMINISTRATOR NAME>

Appendix F: R Code for Calculating Scales Scores

F.1 – R Code for Calculating Student Scale Scores

F.2 – R Code for Calculating Instructional Staff Scale Scores

F.3 – R Code for Calculating Noninstructional Staff Scale Scores

F.1 R Code for Calculating Student Scale Scores

```
#####INSTRUCTION#####
#you only need to specify your data folder and csv dataset name in
the "INPUTS" section below
#the output dataset will be produced in the folder you specify
#####

#####INPUTS#####
#specify your data folder and csv dataset name
folder <- "C:\\data"
dataname <- "student data.csv"

#####SCALING PROGRAM#####
options(digits=10)
rasch <- function(scalelist=NULL){

  #stepvalues
  c0 <-
c("SENGCLC1","SENGCLC2","SENGCLC3","SENGCLC4","SENGCLC7","SENGREL9",
,"SENGREL11","SENGREL12","SENGREL14","SENGREL153","SENGREL17","SE
NGREL20","SENGREL21","SENGREL29",

      "SENGPAR44","SENGPAR45","SENGPAR46","SENGPAR47","SENGPAR48","
SSAFEMO49","SSAFEMO52","SSAFEMO53","SSAFEMO54","SSAFEMO56","SSAFEM
O57",

      "SSAFPSAF60","SSAFPSAF63","SSAFPSAF65","SSAFPSAF67","SSAFPSAF
68","SSAFPSAF69","SSAFPSAF71","SSAFBUL74","SSAFBUL75","SSAFBUL76",
"SSAFBUL77B","SSAFBUL73","SSAFBUL83",

      "SSAFSUB88","SSAFSUB91","SSAFSUB92","SSAFSUB93","SSAFSUB94","
SENVPENV100","SENVPENV102","SENVPENV105","SENVPENV106","SENVPENV10
7",

      "SENVINS111","SENVINS113","SENVINS114","SENVINS115","SENVINS1
21","SENVMEN130","SENVMEN132","SENVMEN133","SENVMEN134","SENVMEN13
7",

      "SENVDIS142","SENVDIS143","SENVDIS146","SENVDIS147","SENVDIS1
47C")

  c1 <- c(-0.78875,-1.05492,-1.62448,-1.06273,-1.55848,-
0.85153,-1.5662,-1.29414,-1.16345,-1.39924,-1.31609,-1.00054,-
1.26551,-1.50461,-0.96648,-1.13949,-0.90153,-1.52874,-1.45989,-
1.31852,-0.94448,-1.2622,-0.63684,-1.15998,-1.24246,-1.37734,-
1.49959,-1.79461,-0.97429,-0.46271,-0.98332,-0.70971,-0.93276,-
1.08731,-0.88745,-0.99103,-0.74975,-0.48686,-1.43769,-1.26485,-
1.45764,-1.11312,-0.99296,-0.26774,-0.76897,-1.75578,-1.68167,-
1.3113,-1.45817,-1.50303,-1.51808,-1.56573,-2.17594,-1.36726,-
1.43412,-1.32998,0.01844,-0.55129,-1.85602,-1.33692,-1.52999,-
0.97713,-1.01377)

  c2 <- c(-0.21703,-0.28053,-0.93491,-0.08095,-
1.07035,0.08076,-0.64299,-0.30329,-1.11969,-1.26057,-
```

```

0.58426,0.27918,-0.30197,-1.6245,-0.31612,-0.31614,0.04331,-
1.64904,-1.29887,-0.20963,0.64347,0.18059,-1.00064,-0.87809,-
1.19071,-1.60121,-1.86739,-1.02908,0.409,0.60242,0.27868,0.22273,-
0.43087,-0.66768,-0.07372,-0.23889,0.12817,0.66538,-0.53632,-
0.31178,-0.67124,0.09186,0.30189,0.64352,0.61901,-1.03838,-
0.84567,0.1471,-0.65166,-1.12665,-0.3728,-1.31969,-2.44026,-
0.98957,-1.05698,-0.83319,1.43524,0.69667,-1.71075,-0.50223,-
0.49712,-0.38865,-0.44535)
  c3 <-
c(1.57688,1.66978,1.7732,1.75791,1.55151,2.3436,2.05206,2.11375,1.
71436,1.58861,2.10085,2.81532,2.74676,1.42365,1.52566,1.34795,2.31
543,0.92706,1.70043,3.04135,2.55789,2.72564,1.30781,1.53565,1.4781
,1.44091,0.04924,0.20637,1.55363,1.52261,1.8749,2.25184,1.19481,1.
1134,1.12721,1.4602,2.18581,2.06364,0.401,0.46776,0.29589,0.55688,
0.53804,2.76426,2.46559,2.06678,1.89642,2.23771,1.58809,1.78822,2.
00599,0.97379,0.28715,1.41965,1.46653,1.49697,2.60976,2.68917,1.41
993,1.66905,1.88276,1.41806,1.91599)
  Rstepvalues <- as.data.frame(rbind(c1,c2,c3))
  names(Rstepvalues) <- c0

  #items that are negatively valenced
  negative <- c("SSAFPSAF63", "SSAFPSAF65", "SSAFPSAF67",
"SSAFPSAF68", "SSAFPSAF69", "SSAFPSAF71", "SSAFBUL74",
"SSAFBUL75", "SSAFBUL76", "SSAFBUL77B",
  "SSAFBUL73",
"SSAFBUL83","SSAFSUB88","SSAFSUB91","SSAFSUB92","SSAFSUB93","SSAFS
UB94")

  for (scalename in scalelist) {

    stepvalues <- Rstepvalues[eval(as.name(scalename)) ]
    items <- names(stepvalues)

    tempdata <- indata[c0]
    tempdata[tempdata < 0] <- NA
    tempdata[negative] <- 5-tempdata[negative]
    tempdata <- tempdata[items]
    tempdata <- tempdata[]-1

    tdata <- tempdata
    tdata$counts = apply(tdata,1,function(x)
sum(!is.na(x[])))
    titems <- names(stepvalues)
    tstepvalues <- stepvalues
    tv1 <- paste("tv1", titems, sep="")
    tv2 <- paste("tv2", titems, sep="")
    tv3 <- paste("tv3", titems, sep="")
    tdata[tv1] <- stepvalues[1,]
    tdata[tv2] <- stepvalues[2,]
    tdata[tv3] <- stepvalues[3,]
    nm <- paste("nm", titems, sep="")
    tdata[nm] <- tdata[titems]*0+1
    tdata$anm <- rowSums(tdata[nm],na.rm=TRUE)

```

```

tdata[tv1] <- tdata[tv1]*tdata[nm]
tdata[tv2] <- tdata[tv2]*tdata[nm]
tdata[tv3] <- tdata[tv3]*tdata[nm]
tdata$r1 <- tdata$anm*0
tdata$ru <- tdata$anm*3
tdata$ru[tdata$ru==0] <- 1
tdata$r <- rowSums(tdata[items],na.rm=TRUE)
tdata$r[tdata$r==tdata$r1] <-
tdata$r1[tdata$r==tdata$r1]+0.3
tdata$r[tdata$r==tdata$ru] <-
tdata$ru[tdata$r==tdata$ru]-0.3
d <- mean(colMeans(tstepvalues[,na.rm=TRUE]))
tdata$t0 <- d + log((tdata$r-tdata$r1)/(tdata$ru-
tdata$r))

tdata$t <- 0
tdata$t1 <- 1
iter <- 1
while(max(abs(tdata$t1-tdata$t),na.rm=TRUE)>0.0000001 &
iter <=100) {
  if (iter==1) {tdata$t <- tdata$t0
  } else if (iter>1) {tdata$t <- tdata$t1}
  iter <- iter+1
  for (n in 1:ncol(tstepvalues)) {
    jp <- paste("jp", titems[n], sep="")
    j2p <- paste("j2p", titems[n], sep="")
    dj <- paste("dj", titems[n], sep="")
    tdata$p1 <- exp(1*tdata$t-tdata[,tv1[n]])/
      (1+exp(1*tdata$t-
tdata[,tv1[n]])+exp(2*tdata$t-tdata[,tv1[n]]-tdata[,tv2[n]]))+
      exp(3*tdata$t-tdata[,tv1[n]]-
tdata[,tv2[n]]-tdata[,tv3[n]]))
    tdata$p2 <- exp(2*tdata$t-tdata[,tv1[n]]-
tdata[,tv2[n]])/
      (1+exp(1*tdata$t-
tdata[,tv1[n]])+exp(2*tdata$t-tdata[,tv1[n]]-tdata[,tv2[n]]))+
      exp(3*tdata$t-tdata[,tv1[n]]-
tdata[,tv2[n]]-tdata[,tv3[n]]))
    tdata$p3 <- exp(3*tdata$t-tdata[,tv1[n]]-
tdata[,tv2[n]]-tdata[,tv3[n]])/
      (1+exp(1*tdata$t-
tdata[,tv1[n]])+exp(2*tdata$t-tdata[,tv1[n]]-tdata[,tv2[n]]))+
      exp(3*tdata$t-tdata[,tv1[n]]-
tdata[,tv2[n]]-tdata[,tv3[n]]))
    tdata$p1[is.na(tdata[,tv1[n]])] <- NA
    tdata$p2[is.na(tdata[,tv1[n]])] <- NA
    tdata$p3[is.na(tdata[,tv1[n]])] <- NA
    tdata[jp] <-
1*tdata$p1+2*tdata$p2+3*tdata$p3
    tdata[j2p] <-
1*1*tdata$p1+2*2*tdata$p2+3*3*tdata$p3
    tdata[dj] <- tdata[j2p]-tdata[jp]*tdata[jp]
  }
}

```

```

        tdata$e <- rowSums(tdata[, grep("jp",
names(tdata))],na.rm = TRUE)
        tdata$v <- rowSums(tdata[, grep("dj",
names(tdata))],na.rm = TRUE)
        tdata$t1 <- tdata$t+(tdata$r-
tdata$e)/pmax(2*tdata$v,1,na.rm = TRUE)
    }
    tdata$t1[tdata$t1>30] <- NA
    tdata$t1[tdata$counts<3 | tdata$counts<0.5*ncol(tempdata)] <-
NA
    tdata$tscore <- round(tdata$t1*50+300)
    tdata$tscore[tdata$tscore<100] <- 100
    tdata$tscore[tdata$tscore>500] <- 500
    tdata$se <- 1/tdata$v^0.5
    tdata$se[is.na(tdata$t1)] <- NA
    score_data <- tdata[c("tscore")]
    names(score_data)[names(score_data) == "tscore"] <- scalename
    assign(scalename,score_data,envir = .GlobalEnv)
  }
}

#####SPECIFICATION AND OUTPUT#####
#read in data
indata <- read.table(file=sprintf("%s\\%s", folder,
dataname),header=TRUE,sep=",")
names(indata) <- toupper(names(indata))

#item names for each scale
eng <-
c("SENGCLC1","SENGCLC2","SENGCLC3","SENGCLC4","SENGCLC7","SENGREL9",
"SENGREL11","SENGREL12","SENGREL14","SENGREL153","SENGREL17","SENGREL20",
"SENGREL21","SENGREL29",
"SENGPAR44","SENGPAR45","SENGPAR46","SENGPAR47","SENGPAR48")
clc <- c("SENGCLC1", "SENGCLC2", "SENGCLC3", "SENGCLC4",
"SENGCLC7")
rel <-
c("SENGREL9","SENGREL11","SENGREL12","SENGREL14","SENGREL153","SENGREL17",
"SENGREL20","SENGREL21","SENGREL29")
par <-
c("SENGPAR44","SENGPAR45","SENGPAR46","SENGPAR47","SENGPAR48")
saf <-
c("SSAFEMO49","SSAFEMO52","SSAFEMO53","SSAFEMO54","SSAFEMO56","SSAFEMO57",
"SSAFPSAF60","SSAFPSAF63","SSAFPSAF65","SSAFPSAF67","SSAFPSAF68",
"SSAFPSAF69","SSAFPSAF71",
"SSAFBUL74","SSAFBUL75","SSAFBUL76","SSAFBUL77B","SSAFBUL73",
"SSAFBUL83","SSAFSUB88","SSAFSUB91","SSAFSUB92","SSAFSUB93","SSAFSUB94")
emo <- c("SSAFEMO49", "SSAFEMO52", "SSAFEMO53", "SSAFEMO54",
"SSAFEMO56", "SSAFEMO57")
psaf <- c("SSAFPSAF60", "SSAFPSAF63", "SSAFPSAF65", "SSAFPSAF67",
"SSAFPSAF68", "SSAFPSAF69", "SSAFPSAF71")

```

```

bul <-
c("SSAFBUL74","SSAFBUL75","SSAFBUL76","SSAFBUL77B","SSAFBUL73","SS
AFBUL83")
sub <-
c("SSAFSUB88","SSAFSUB91","SSAFSUB92","SSAFSUB93","SSAFSUB94")
env <-
c("SENVPENV100","SENVPENV102","SENVPENV105","SENVPENV106","SENVPEN
V107","SENVINS111","SENVINS113","SENVINS114","SENVINS115","SENVINS
121","SENVMEN130","SENVMEN132",
  "SENVMEN133","SENVMEN134","SENVMEN137","SENVDIS142","SENVDIS1
43","SENVDIS146","SENVDIS147","SENVDIS147C")
penv <-
c("SENVPENV100","SENVPENV102","SENVPENV105","SENVPENV106","SENVPEN
V107")
ins <-
c("SENVINS111","SENVINS113","SENVINS114","SENVINS115","SENVINS121"
)
men <- c("SENVMEN130", "SENVMEN132", "SENVMEN133", "SENVMEN134",
"SENVMEN137")
dis <-
c("SENVDIS142","SENVDIS143","SENVDIS146","SENVDIS147","SENVDIS147C
")

#run scaling program for each scale
rasch(scalelist=c("eng","clc","rel","par","saf","emo","psaf","bul"
,"sub","env","penv","ins","men","dis"))

#combine scale score data
out <-
cbind(indata,eng,clc,rel,par,saf,emo,psaf,bul,sub,env,penv,ins,men
,dis)

#####OUTPUT DATASET WITH SCALE SCORES#####
write.table(out, sprintf("%s\\Scale scores_%s", folder, dataname),
col.names=T,row.names=F,sep=",")

#####END OF PROGRAM#####

```

F.2 R Code for Calculating Instructional Staff Scale Scores

```
#####INSTRUCTION#####
#you only need to specify your data folder and csv dataset name in
the "INPUTS" section below
#the output dataset will be produced in the folder you specify
#####

#####INPUTS#####
#specify your data folder and csv dataset name
folder <- "C:\\data"
dataname <- "noninstructional staff data.csv"

#####SCALING PROGRAM#####
options(digits=10)
rasch <- function(scalelist=NULL){

  #stepvalues
  c0 <-
c("IENGCLC2","IENGCLC3","IENGCLC4","IENGCLC6","IENGCLC7","IENGCLC8",
", "IENGREL9","IENGREL10","IENGREL12","IENGREL14","IENGREL15",

"IENGP29","IENGP31","IENGP32","IENGP36","IENGP42","IENGP
AR48","ISAFEMO52","ISAFEMO53","ISAFEMO54","ISAFEMO55",

"ISAFEMO56","ISAFEMO58","ISAFPSAF60","ISAFPSAF61","ISAFPSAF62","IS
AFPSAF64","ISAFPSAF66","ISAFPSAF67","ISAFBUL68",

"ISAFBUL69","ISAFBUL71","ISAFBUL73","ISAFBUL79","ISAFBUL80","ISAFB
UL81","ISAFBUL82","ISAFSUB86","ISAFSUB87","ISAFSUB88","ISAFSUB91",

"IENVPENV97","IENVPENV98","IENVPENV100","IENVPENV101","IENVPENV102
", "IENVPENV103","IENVINS105","IENVINS107","IENVINS108",

"IENVINS110","IENVINS115","IENVINS116","IENVPHEA119","IENVPHEA120"
, "IENVPHEA121","IENVPHEA122","IENVMEN123","IENVMEN125",

"IENVMEN126","IENVMEN128","IENVMEN137","IENVDIS129","IENVDIS130","
IENVDIS134","IENVDIS134C","IENVDIS135","IENVDIS136")

  c1 <- c(-1.99835,-2.39109,-2.80689,-3.43377,-1.81612,-
2.10355,-2.77812,-3.1806,-4.27822,-2.27639,-2.79966,-1.71999,-
1.60303,-1.90877,-1.14972,-2.47869,-2.58659,-1.73215,-0.97128,-
0.92064,-1.94916,-1.43668,-2.99142,-0.98865,-1.74182,-1.67606,-
2.90721,-2.22935,-0.44409,-0.83339,-0.66141,-2.47597,-2.70464,-
3.08741,-2.40559,-2.37449,-2.38111,-2.12251,-2.17725,-2.10603,-
2.59293,-2.22147,-2.29954,-1.61935,-1.44799,-1.50771,-1.13226,-
1.21715,-1.6762,-2.54342,-3.05883,-2.91023,-2.02444,-2.68916,-
2.3273,-2.74076,-2.49484,-2.31968,-2.18914,-2.35856,-2.337,-
2.31716,-2.40294,-3.01256,-1.10902,-1.52086,-1.34924,-2.45724)

  c2 <- c(-0.77886,-1.21001,-0.46992,-1.56168,0.0964,-0.87664,-
1.30971,-0.77381,-0.55032,0.11933,-1.78529,-
0.17361,0.3429,1.03687,0.59365,0.21744,-1.83969,-1.21715,-0.1153,-
0.18849,-0.5519,-1.43674,-1.33741,0.16897,-0.07107,-0.21374,-
```

```

1.6666,-1.79307,0.80514,0.92368,1.66504,-0.48528,-0.85656,-
1.92311,-2.24153,-2.04419,-1.84672,0.07037,0.05528,-
0.36426,0.10812,-1.41585,-1.38398,-0.60039,-0.98497,-0.71434,-
0.34646,0.59101,0.34823,-1.16706,-1.44582,-2.41255,-1.12278,-
0.14647,-0.43589,-0.79129,-0.41945,-1.3582,-0.20217,-
0.2126,0.36541,-0.3862,-1.27153,-2.74779,0.22789,0.11979,0.18591,-
1.6821)
  c3 <-
c(1.60855,1.54971,3.54285,1.77495,2.98644,3.25601,2.93739,3.00246,
3.6929,3.26601,2.26047,3.25928,3.39012,4.64164,3.52706,4.02898,1.5
0768,1.90416,2.61649,2.02041,1.90171,2.18536,2.23903,3.56204,2.999
18,3.09508,1.78357,1.21765,3.12462,4.50997,4.33249,3.68223,1.97452
,1.15338,1.09395,1.02739,1.06286,3.23138,3.40788,3.07513,3.26726,1
.49529,1.75192,2.42035,2.67412,2.76633,2.87,4.53088,4.03849,3.3958
,2.14034,1.92357,2.24296,3.12301,3.1541,3.20444,3.38611,2.44545,3.
41445,3.44235,4.03973,3.50035,2.12804,1.67295,2.57273,3.01242,3.00
351,2.34403)
  Rstepvalues <- as.data.frame(rbind(c1,c2,c3))
  names(Rstepvalues) <- c0

  #items that are negatively valenced
  negative <-
c("ISAFPSAF60","ISAFPSAF61","ISAFPSAF62","ISAFPSAF64","ISAFPSAF66"
,"ISAFPSAF67","ISAFBUL68","ISAFBUL69","ISAFBUL79",

"ISAFBUL80","ISAFBUL81","ISAFBUL82","IENVPENV100","IENVPENV101","I
ENVPENV102","IENVPENV103")

  for (scalename in scalelist) {

    stepvalues <- Rstepvalues[eval(as.name(scalename))]
    items <- names(stepvalues)

    tempdata <- indata[c0]
    tempdata[tempdata < 0] <- NA
    tempdata[negative] <- 5-tempdata[negative]
    tempdata <- tempdata[items]
    tempdata <- tempdata[]-1

    tdata <- tempdata
    tdata$counts = apply(tdata,1,function(x)
sum(!is.na(x[])))
    titems <- names(stepvalues)
    tstepvalues <- stepvalues
    tv1 <- paste("tv1", titems, sep="")
    tv2 <- paste("tv2", titems, sep="")
    tv3 <- paste("tv3", titems, sep="")
    tdata[tv1] <- stepvalues[1,]
    tdata[tv2] <- stepvalues[2,]
    tdata[tv3] <- stepvalues[3,]
    nm <- paste("nm", titems, sep="")
    tdata[nm] <- tdata[titems]*0+1
    tdata$anm <- rowSums(tdata[nm],na.rm=TRUE)
  }

```

```

tdata[tv1] <- tdata[tv1]*tdata[nm]
tdata[tv2] <- tdata[tv2]*tdata[nm]
tdata[tv3] <- tdata[tv3]*tdata[nm]
tdata$r1 <- tdata$anm*0
tdata$ru <- tdata$anm*3
tdata$ru[tdata$ru==0] <- 1
tdata$r <- rowSums(tdata[items],na.rm=TRUE)
tdata$r[tdata$r==tdata$r1] <-
tdata$r1[tdata$r==tdata$r1]+0.3
tdata$r[tdata$r==tdata$ru] <-
tdata$ru[tdata$r==tdata$ru]-0.3
d <- mean(colMeans(tstepvalues[,na.rm=TRUE]))
tdata$t0 <- d + log((tdata$r-tdata$r1)/(tdata$ru-
tdata$r))

tdata$t <- 0
tdata$t1 <- 1
iter <- 1
while(max(abs(tdata$t1-tdata$t),na.rm=TRUE)>0.0000001 &
iter <=100) {
  if (iter==1) {tdata$t <- tdata$t0
  } else if (iter>1) {tdata$t <- tdata$t1}
  iter <- iter+1
  for (n in 1:ncol(tstepvalues)) {
    jp <- paste("jp", titems[n], sep="")
    j2p <- paste("j2p", titems[n], sep="")
    dj <- paste("dj", titems[n], sep="")
    tdata$p1 <- exp(1*tdata$t-tdata[,tv1[n]])/
      (1+exp(1*tdata$t-
tdata[,tv1[n]])+exp(2*tdata$t-tdata[,tv1[n]]-tdata[,tv2[n]])+
      exp(3*tdata$t-tdata[,tv1[n]]-
tdata[,tv2[n]]-tdata[,tv3[n]]))
    tdata$p2 <- exp(2*tdata$t-tdata[,tv1[n]]-
tdata[,tv2[n]])/
      (1+exp(1*tdata$t-
tdata[,tv1[n]])+exp(2*tdata$t-tdata[,tv1[n]]-tdata[,tv2[n]])+
      exp(3*tdata$t-tdata[,tv1[n]]-
tdata[,tv2[n]]-tdata[,tv3[n]]))
    tdata$p3 <- exp(3*tdata$t-tdata[,tv1[n]]-
tdata[,tv2[n]]-tdata[,tv3[n]])/
      (1+exp(1*tdata$t-
tdata[,tv1[n]])+exp(2*tdata$t-tdata[,tv1[n]]-tdata[,tv2[n]])+
      exp(3*tdata$t-tdata[,tv1[n]]-
tdata[,tv2[n]]-tdata[,tv3[n]]))
    tdata$p1[is.na(tdata[,tv1[n]])] <- NA
    tdata$p2[is.na(tdata[,tv1[n]])] <- NA
    tdata$p3[is.na(tdata[,tv1[n]])] <- NA
    tdata[jp] <-
1*tdata$p1+2*tdata$p2+3*tdata$p3
    tdata[j2p] <-
1*1*tdata$p1+2*2*tdata$p2+3*3*tdata$p3
    tdata[dj] <- tdata[j2p]-tdata[jp]*tdata[jp]
  }
}

```



```

        tdata$e <- rowSums(tdata[, grep("jp",
names(tdata))],na.rm = TRUE)
        tdata$v <- rowSums(tdata[, grep("dj",
names(tdata))],na.rm = TRUE)
        tdata$t1 <- tdata$t+(tdata$r-
tdata$e)/pmax(2*tdata$v,1,na.rm = TRUE)
    }
    tdata$t1[tdata$t1>30] <- NA
    tdata$t1[tdata$counts<3 | tdata$counts<0.5*ncol(tempdata)] <-
NA
    tdata$tscore <- round(tdata$t1*40+300)
    tdata$tscore[tdata$tscore<100] <- 100
    tdata$tscore[tdata$tscore>500] <- 500
    tdata$se <- 1/tdata$v^0.5
    tdata$se[is.na(tdata$t1)] <- NA
    score_data <- tdata[c("tscore")]
    names(score_data)[names(score_data) == "tscore"] <- scalename
    assign(scalename,score_data,envir = .GlobalEnv)
  }
}

#####SPECIFICATION AND OUTPUT#####
#read in data
indata <- read.table(file=sprintf("%s\\%s", folder,
dataname),header=TRUE,sep=",")
names(indata) <- toupper(names(indata))

#item names for each scale
eng <-
c("IENGCLC2","IENGCLC3","IENGCLC4","IENGCLC6","IENGCLC7","IENGCLC8
","IENGREL9","IENGREL10","IENGREL12","IENGREL14","IENGREL15",

"IENGP29","IENGP31","IENGP32","IENGP36","IENGP42","IENGP
AR48")
clc <-
c("IENGCLC2","IENGCLC3","IENGCLC4","IENGCLC6","IENGCLC7","IENGCLC8
")
rel <-
c("IENGREL9","IENGREL10","IENGREL12","IENGREL14","IENGREL15")
par <-
c("IENGP29","IENGP31","IENGP32","IENGP36","IENGP42","IEN
GPAR48")
saf <- c("ISAFEMO52","ISAFEMO53","ISAFEMO54","ISAFEMO55",

"ISAFEMO56","ISAFEMO58","ISAFPSAF60","ISAFPSAF61","ISAFPSAF62","IS
AFPSAF64","ISAFPSAF66","ISAFPSAF67","ISAFBUL68",

"ISAFBUL69","ISAFBUL71","ISAFBUL73","ISAFBUL79","ISAFBUL80","ISAFB
UL81","ISAFBUL82","ISAFSUB86","ISAFSUB87","ISAFSUB88","ISAFSUB91")
emo <-
c("ISAFEMO52","ISAFEMO53","ISAFEMO54","ISAFEMO55","ISAFEMO56","ISA
FEMO58")

```

```

psaf <-
c("ISAFPSAF60","ISAFPSAF61","ISAFPSAF62","ISAFPSAF64","ISAFPSAF66"
,"ISAFPSAF67")
bul <-
c("ISAFBUL68","ISAFBUL69","ISAFBUL71","ISAFBUL73","ISAFBUL79","ISA
FBUL80","ISAFBUL81","ISAFBUL82")
sub <- c("ISAFSUB86","ISAFSUB87","ISAFSUB88","ISAFSUB91")
env <-
c("IENVPENV97","IENVPENV98","IENVPENV100","IENVPENV101","IENVPENV1
02","IENVPENV103","IENVINS105","IENVINS107","IENVINS108",

"IENVINS110","IENVINS115","IENVINS116","IENVPHEA119","IENVPHEA120"
,"IENVPHEA121","IENVPHEA122","IENVMEN123","IENVMEN125",

"IENVMEN126","IENVMEN128","IENVMEN137","IENVDIS129","IENVDIS130","
IENVDIS134","IENVDIS134C","IENVDIS135","IENVDIS136")
penv <-
c("IENVPENV97","IENVPENV98","IENVPENV100","IENVPENV101","IENVPENV1
02","IENVPENV103")
ins <-
c("IENVINS105","IENVINS107","IENVINS108","IENVINS110","IENVINS115"
,"IENVINS116")
phea <- c("IENVPHEA119","IENVPHEA120","IENVPHEA121","IENVPHEA122")
men <-
c("IENVMEN123","IENVMEN125","IENVMEN126","IENVMEN128","IENVMEN137"
)
dis <-
c("IENVDIS129","IENVDIS130","IENVDIS134","IENVDIS134C","IENVDIS135
","IENVDIS136")

#run scaling program for each scale
rasch(scalelist=c("eng","clc","rel","par","saf","emo","psaf","bul"
,"sub","env","penv","ins","phea","men","dis"))

#combine scale score data
out <-
cbind(indata,eng,clc,rel,par,saf,emo,psaf,bul,sub,env,penv,ins,phe
a,men,dis)

#####OUTPUT DATASET WITH SCALE SCORES#####
write.table(out, sprintf("%s\\Scale scores_%s", folder, dataname),
col.names=T,row.names=F,sep=",")

#####END OF PROGRAM#####

```

F.3 R Code for Calculating Noninstructional Staff Scale Scores

```
#####INSTRUCTION#####
#you only need to specify your data folder and csv dataset name in
the "INPUTS" section below
#the output dataset will be produced in the folder you specify
#####

#####INPUTS#####
#specify your data folder and csv dataset name
folder <- "C:\\data"
dataname <- "noninstructional staff data.csv"

#####SCALING PROGRAM#####
options(digits=10)
rasch <- function(scalelist=NULL){

  #stepvalues
  c0 <-
c("NENGCLC2","NENGCLC3","NENGCLC4","NENGCLC6","NENGCLC7","NENGCLC8",
"NENGREL16","NENGREL17","NENGREL18","NENGREL24","NENGREL25","NEN
GREL30",

"NENGPARG34","NENGPARG37","NENGPARG38","NENGPARG44","NENGPARG47","NSAFE
MO51","NSAFEMO52","NSAFEMO53","NSAFEMO54","NSAFEMO55","NSAFEMO148"
,

"NSAFPSAF57","NSAFPSAF58","NSAFPSAF59","NSAFPSAF61","NSAFPSAF63",""
NSAFPSAF64","NSAFBUL65","NSAFBUL66","NSAFBUL70","NSAFBUL76","NSAFB
UL77",

"NSAFBUL78","NSAFBUL79","NSAFSUB83","NSAFSUB84","NSAFSUB85","NSAFS
UB87","NSAFSUB88","NENVPENV97","NENVPENV98","NENVPENV99","NENVPENV
100",

"NENVPENV102","NENVPENV103","NENVINS109","NENVINS110","NENVINS111"
,"NENVINS140","NENVINS141","NENVPHEA115","NENVPHEA117","NENVPHEA11
8",

"NENVPHEA119","NENVMEN122","NENVMEN125","NENVMEN126","NENVMEN127",
"NENVDIS130","NENVDIS131","NENVDIS132","NENVDIS134","NENVDIS134C",
"NENVDIS135","NENVDIS136","NENVDIS137")

  c1 <- c(-2.47335,-3.12118,-2.44881,-2.62479,-2.44126,-
2.85593,-2.34439,-3.26496,-2.65232,-2.93273,-2.41185,-3.00082,-
1.39213,-2.28872,-1.74474,-2.58179,-3.59618,-0.78796,-0.93007,-
0.72802,-1.09807,-1.21628,-2.77812,-0.9483,-2.66115,-1.85525,-
2.76659,-1.50953,-0.45164,-1.24229,-0.95227,-2.35492,-1.40437,-
1.58465,-2.388,-1.08607,-1.81697,-1.90858,-1.76222,-1.68474,-
1.83581,-1.36935,-2.39965,-1.58974,-2.20198,-1.526,-2.98128,-
3.19515,-2.38187,-1.22498,-4.34738,-4.96454,-2.33403,-1.95401,-
2.32553,-2.12889,-1.24412,-2.13521,-1.5639,-2.20123,-2.66149,-
3.21749,-2.58847,-0.78746,-1.10803,-2.58155,-0.8116,-1.69365)
```

```

      c2 <- c(-0.59231,-0.71233,-0.35806,-2.12946,-0.34533,-
0.49625,-1.63398,-0.59272,-0.743,-1.03352,0.08576,-
0.91986,0.71752,0.15594,1.34711,0.09105,-1.58367,-1.3343,-
0.06666,-0.0483,-0.6221,-1.42319,-0.64764,0.55162,-0.2678,-
0.53248,-1.3522,-1.8491,0.67846,0.66538,1.40591,-1.19948,-
1.95713,-2.21185,-1.80008,-2.3348,-0.33822,-0.22051,-0.77449,-
0.62916,-0.32918,-0.77353,-1.58338,-1.45517,-0.7459,-2.25719,-
1.41176,-1.03995,0.07605,-0.80725,-0.9834,-1.60056,0.00124,-
0.77896,-0.93413,-0.49421,-0.77809,0.31052,0.11272,-0.96443,-
0.99781,-2.21842,-1.87496,0.09525,0.13468,-0.40997,-0.16708,-
1.46652)

      c3 <-
c(1.81328,2.01916,3.62035,2.06241,2.64451,2.99176,3.28841,3.39963,
3.5067,2.30983,2.85548,3.47637,3.51364,3.63617,5.43808,4.2713,2.07
2,1.68814,2.1394,1.79147,1.55699,2.0011,2.13703,3.12227,2.56689,2.
75426,1.39113,1.19004,2.60444,4.28512,3.52242,1.8318,1.23005,1.118
75,1.02224,1.16805,2.79348,3.14775,2.83396,3.23192,3.26042,2.9194,
3.01398,3.11637,3.06787,2.31612,2.4532,3.3265,3.87898,2.82277,2.64
026,2.02309,3.18495,2.81448,3.40057,3.94652,3.64055,4.44813,3.9048
8,2.79128,2.95922,2.09481,2.36145,2.72721,3.11152,3.58069,3.17438,
2.8116)

      Rstepvalues <- as.data.frame(rbind(c1,c2,c3))
      names(Rstepvalues) <- c0

      #items that are negatively valenced
      negative <-
c("NSAFPSAF57","NSAFPSAF58","NSAFPSAF59","NSAFPSAF61","NSAFPSAF63"
,"NSAFPSAF64","NSAFBUL65","NSAFBUL66","NSAFBUL76","NSAFBUL77",

"NSAFBUL78","NSAFBUL79","NENVPENV97","NENVPENV98","NENVPENV99","NE
NVPENV100")

      for (scalename in scalelist) {

        stepvalues <- Rstepvalues[eval(as.name(scalename)) ]
        items <- names(stepvalues)

        tempdata <- indata[c0]
        tempdata[tempdata < 0] <- NA
        tempdata[negative] <- 5-tempdata[negative]
        tempdata <- tempdata[items]
        tempdata <- tempdata[]-1

        tdata <- tempdata
        tdata$counts = apply(tdata,1,function(x)
sum(!is.na(x[])))
        titems <- names(stepvalues)
        tstepvalues <- stepvalues
        tv1 <- paste("tv1", titems, sep="")
        tv2 <- paste("tv2", titems, sep="")
        tv3 <- paste("tv3", titems, sep="")
        tdata[tv1] <- stepvalues[1,]
        tdata[tv2] <- stepvalues[2,]

```

```

tdata[tv3] <- stepvalues[3,]
nm <- paste("nm", titems, sep="")
tdata[nm] <- tdata[titems]*0+1
tdata$anm <- rowSums(tdata[nm],na.rm=TRUE)
tdata[tv1] <- tdata[tv1]*tdata[nm]
tdata[tv2] <- tdata[tv2]*tdata[nm]
tdata[tv3] <- tdata[tv3]*tdata[nm]
tdata$r1 <- tdata$anm*0
tdata$ru <- tdata$anm*3
tdata$ru[tdata$ru==0] <- 1
tdata$r <- rowSums(tdata[items],na.rm=TRUE)
tdata$r[tdata$r==tdata$r1] <-
tdata$r1[tdata$r==tdata$r1]+0.3
tdata$r[tdata$r==tdata$ru] <-
tdata$ru[tdata$r==tdata$ru]-0.3
d <- mean(colMeans(tstepvalues[,na.rm=TRUE]))
tdata$t0 <- d + log((tdata$r-tdata$r1)/(tdata$ru-
tdata$r))
tdata$t <- 0
tdata$t1 <- 1
iter <- 1
while(max(abs(tdata$t1-tdata$t),na.rm=TRUE)>0.0000001 &
iter <=100) {
  if (iter==1) {tdata$t <- tdata$t0
    } else if (iter>1) {tdata$t <- tdata$t1}
  iter <- iter+1
  for (n in 1:ncol(tstepvalues)) {
    jp <- paste("jp", titems[n], sep="")
    j2p <- paste("j2p", titems[n], sep="")
    dj <- paste("dj", titems[n], sep="")
    tdata$p1 <- exp(1*tdata$t-tdata[,tv1[n]])/
      (1+exp(1*tdata$t-
tdata[,tv1[n]])+exp(2*tdata$t-tdata[,tv1[n]]-tdata[,tv2[n]])+
      exp(3*tdata$t-tdata[,tv1[n]]-
tdata[,tv2[n]]-tdata[,tv3[n]]))
    tdata$p2 <- exp(2*tdata$t-tdata[,tv1[n]]-
tdata[,tv2[n]])/
      (1+exp(1*tdata$t-
tdata[,tv1[n]])+exp(2*tdata$t-tdata[,tv1[n]]-tdata[,tv2[n]])+
      exp(3*tdata$t-tdata[,tv1[n]]-
tdata[,tv2[n]]-tdata[,tv3[n]]))
    tdata$p3 <- exp(3*tdata$t-tdata[,tv1[n]]-
tdata[,tv2[n]]-tdata[,tv3[n]])/
      (1+exp(1*tdata$t-
tdata[,tv1[n]])+exp(2*tdata$t-tdata[,tv1[n]]-tdata[,tv2[n]])+
      exp(3*tdata$t-tdata[,tv1[n]]-
tdata[,tv2[n]]-tdata[,tv3[n]]))
    tdata$p1[is.na(tdata[,tv1[n]])] <- NA
    tdata$p2[is.na(tdata[,tv1[n]])] <- NA
    tdata$p3[is.na(tdata[,tv1[n]])] <- NA
    tdata[jp] <-
1*tdata$p1+2*tdata$p2+3*tdata$p3
  }
}

```

```

        tdata[j2p] <-
1*1*tdata$p1+2*2*tdata$p2+3*3*tdata$p3
        tdata[dj] <- tdata[j2p]-tdata[jp]*tdata[jp]
    }
    tdata$e <- rowSums(tdata[, grep("jp",
names(tdata))],na.rm = TRUE)
    tdata$v <- rowSums(tdata[, grep("dj",
names(tdata))],na.rm = TRUE)
    tdata$t1 <- tdata$t+(tda$e-
tda$e)/pmax(2*tda$v,1,na.rm = TRUE)
    }
    tdata$t1[tdata$t1>30] <- NA
    tdata$t1[tdata$counts<3 | tdata$counts<0.5*ncol(tempdata)] <-
NA
    tdata$tscore <- round(tdata$t1*40+300)
    tdata$tscore[tdata$tscore<100] <- 100
    tdata$tscore[tdata$tscore>500] <- 500
    tdata$se <- 1/tda$v^0.5
    tdata$se[is.na(tdata$t1)] <- NA
    score_data <- tdata[c("tscore")]
    names(score_data)[names(score_data) == "tscore"] <- scalename
    assign(scalename,score_data,envir = .GlobalEnv)
    }
}

#####SPECIFICATION AND OUTPUT#####
#read in data
indata <- read.table(file=sprintf("%s\\%s", folder,
dataname),header=TRUE,sep=",")
names(indata) <- toupper(names(indata))

#item names for each scale
eng <-
c("NENGCLC2","NENGCLC3","NENGCLC4","NENGCLC6","NENGCLC7","NENGCLC8
","NENGREL16","NENGREL17","NENGREL18","NENGREL24","NENGREL25","NEN
GREL30",

"NENGP34","NENGP37","NENGP38","NENGP44","NENGP47")
clc <-
c("NENGCLC2","NENGCLC3","NENGCLC4","NENGCLC6","NENGCLC7","NENGCLC8
")
rel <-
c("NENGREL16","NENGREL17","NENGREL18","NENGREL24","NENGREL25","NEN
GREL30")
par <-
c("NENGP34","NENGP37","NENGP38","NENGP44","NENGP47")
saf <-
c("NSAFEMO51","NSAFEMO52","NSAFEMO53","NSAFEMO54","NSAFEMO55","NSA
FEMO148",

"NSAFPSAF57","NSAFPSAF58","NSAFPSAF59","NSAFPSAF61","NSAFPSAF63","
NSAFPSAF64","NSAFBUL65","NSAFBUL66","NSAFBUL70","NSAFBUL76","NSAFB
UL77",

```

```

"NSAFBUL78","NSAFBUL79","NSAFSUB83","NSAFSUB84","NSAFSUB85","NSAFS
UB87","NSAFSUB88")
emo <-
c("NSAFEMO51","NSAFEMO52","NSAFEMO53","NSAFEMO54","NSAFEMO55","NSA
FEMO148")
psaf <-
c("NSAFPSAF57","NSAFPSAF58","NSAFPSAF59","NSAFPSAF61","NSAFPSAF63"
,"NSAFPSAF64")
bul <-
c("NSAFBUL65","NSAFBUL66","NSAFBUL70","NSAFBUL76","NSAFBUL77","NSA
FBUL78","NSAFBUL79")
sub <-
c("NSAFSUB83","NSAFSUB84","NSAFSUB85","NSAFSUB87","NSAFSUB88")
env <- c("NENVPENV97","NENVPENV98","NENVPENV99","NENVPENV100",

"NENVPENV102","NENVPENV103","NENVINS109","NENVINS110","NENVINS111"
,"NENVINS140","NENVINS141","NENVPHEA115","NENVPHEA117","NENVPHEA11
8",

"NENVPHEA119","NENVMEN122","NENVMEN125","NENVMEN126","NENVMEN127",
"NENVDIS130","NENVDIS131","NENVDIS132","NENVDIS134","NENVDIS134C",
"NENVDIS135","NENVDIS136","NENVDIS137")
penv <-
c("NENVPENV97","NENVPENV98","NENVPENV99","NENVPENV100","NENVPENV10
2","NENVPENV103")
ins <-
c("NENVINS109","NENVINS110","NENVINS111","NENVINS140","NENVINS141"
)
phea <- c("NENVPHEA115","NENVPHEA117","NENVPHEA118","NENVPHEA119")
men <- c("NENVMEN122","NENVMEN125","NENVMEN126","NENVMEN127")
dis <-
c("NENVDIS130","NENVDIS131","NENVDIS132","NENVDIS134","NENVDIS134C
","NENVDIS135","NENVDIS136","NENVDIS137")

#run scaling program for each scale
rasch(scalelist=c("eng","clc","rel","par","saf","emo","psaf","bul"
,"sub","env","penv","ins","phea","men","dis"))

#combine scale score data
out <-
cbind(indata,eng,clc,rel,par,saf,emo,psaf,bul,sub,env,penv,ins,phe
a,men,dis)

#####OUTPUT DATASET WITH SCALE SCORES#####
write.table(out, sprintf("%s\\Scale scores_%s", folder, dataname),
col.names=T,row.names=F,sep=",")

#####END OF PROGRAM#####

```